

CONTRACT

THIS AGREEMENT, made and concluded this day of _____, by and between the **CITY OF READING**, a municipal corporation of the Commonwealth of Pennsylvania, located in the County of Berks, said Commonwealth, party of the first part, and **TELCO, INC.**, Contractor, party of the second part, pursuant to law and to the provisions and requirements of the ordinance of the City of Reading, Pennsylvania.

WITNESSETH, that the parties to these presents, each in consideration of the agreements on the part of the other herein contained, have agreed, and hereby do agree, the party of the first part for itself, its successors and assign, and the party of the second part for itself, himself, or themselves, its successors, or his or their executors and administrators as follows:

CONTRACTOR'S GENERAL AGREEMENT. The Contractor covenant, promises and agrees to and with the party of the first part, for the consideration hereinafter mentioned and contained, and under the penalty expressed in a bond and hereto attached, to furnish all the material, machinery, equipment, tools, labor and transportation, except as hereinafter otherwise provided, at his own cost, necessary or proper for the purpose of executing the work embraced in this contract in a good, substantial and workmanlike manner, and in strict accordance with the specifications pertaining to this contract a herein contained.

PARTS OF CONTRACT. The Location Map; Notice to Contractors; Bid Instructions; Documents to be Submitted with Bid; Contract Documents; Documents to be Submitted During the Course of the Contract; Wage Rate Determinations; Notice of Preconstruction Requirements and Pre-Construction Conference Questionnaire; Affirmative Action Requirements; General Provisions; Supplementary General Terms and Conditions; Technical Specifications; Supplementary Technical Specifications; and Correspondence and Supportive Documentation shall each form a part of the Contract.

THE CONTRACT SUM. The City shall pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, in current funds as follows:

TWO HUNDRED FIFTY EIGHT THOUSAND FOUR HUNDRED AND FORTY SEVEN DOLLARS (\$258,447.00).

For 2022 Traffic Signal Repair.

Where the quantities originally contemplated are so changed that application of the agreed unit price to the quantity of work performed is shown to create a hardship to the Owner or the Contractor, there shall be an equitable adjustment of the Contract to prevent such hardship.

TIME & MANNER OF DOING WORK. The party of the second part agrees to commence the construction of the work to be done under this contract, immediately upon receiving written notice from the Director of Public Works, or other applicable Director, so to do and to complete the entire work as specified in the technical specifications, it being expressly agreed and understood that the time of beginning, rates of progress and time of completion of the work are essential under this contract. Time is to be considered to be the essence of this contract.

STIPULATED DAMAGES. The Contractor shall begin work within ten (10) days of receipt of written notice from the applicable Director, to do so. If the Contractor fails to complete and finish the work in conformity with the terms and provisions of this Contract within the time hereinbefore specified, he shall pay to the City the sum of Five Hundred Dollars (\$500.00) for each and every day thereafter, including Sundays and holidays, that the finishing of the Contract is delayed, which sum shall be construed as stipulated and liquidated damages and not as a penalty and shall be deducted from the amount due by the terms of the Contract; provided, however, that in case of justifiable delay, the City shall extend the time for completion of said work as provided for in Article G.7, but no extension of time for any reason beyond the time fixed herein for the completion of the work shall be deemed a waiver by the City of the right to abrogate this Contract for abandonment for delay.

LIENS. Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lien thereof, and, if required in either case, an affidavit that so far as he has knowledge or information the release and receipts include all the labor and material for which a lien could be filed. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the City all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

IN WITNESS WHEREOF, the said City of Reading has caused this Agreement to be executed by its Mayor, and its corporate seal to be hereunto affixed, duly attested by its City Clerk, and the Vendor has caused this Agreement to be executed by its President and its corporate seal to be hereunto affixed, duly attested by its Secretary, has hereunto set his/their hand(s) and seal(s) the day and year first above written.

Signed and sealed in the Presence of:

Attest:

DocuSigned by:
Linda A. Kelleher CMC, City Clerk
 73DE031C240D451...

 City Clerk

CITY OF READING

DocuSigned by:
Mayor Eddie Moran
 9DB620E27C594BB...
 By: _____
 Mayor Eddie Moran

DocuSigned by:
Carla Waligorski
 D42E0958B9F1473
 By: _____

TELCO INC.

DocuSigned by:
teddy chung
 6BA6397DE052405...
 By: _____
 Teddy Chung

ADDENDUM

PROPOSAL
FOR
2022 TRAFFIC SIGNAL REPAIR PROJECT
CITY OF READING, PENNSYLVANIA

Proposal of

TELCO, INC.

(name)

1224 CROSS KEYS ROAD, READING, PA 19605

(address)

TO: Mayor Eddie Moran
City of Reading
815 Washington Street
Reading, PA 19601

Dear Mayor Moran:

In conformity with City Plans and specifications, all as prepared by the Public Works Department and after an examination of the site of the work, and the Contract Documents, including the instructions to Bidders, Form of Proposal, Bid Bond and Conditions, the undersigned submits this proposal, and encloses herewith as proposal guaranty, a Certified or Treasurer's Check, or Bid Bond, in an amount not less than ten percent (10%) of the bid herein submitted, which it is understood will be forfeited if this proposal is accepted by the City of Reading, and the undersigned fails to furnish approved bonds and execute the contract within the time stipulated; otherwise, the guarantee will be returned.

The undersigned declares that no Member of Council, Director of Department, Division Manager, deputy thereof or clerk therein, or other officer of the City of Reading, is directly or indirectly interested as principal, surety or otherwise in this proposal or has any supervision or overall responsibility for the implementation in administration of the contract.

It is certified that the undersigned is the only person(s) interested in this proposal as principal and that the proposal is made without collusion with any person, firm, or corporation.

It is hereby agreed to execute the contract and furnish surety company bonds, on the forms enclosed in the Contract Documents, in the amount of one hundred percent (100%) of the contract price within ten (10) days of mailing of the contract documents from the City to the Principal, and to begin work within ten (10) days after receipt of Notice to Proceed from the City of Reading.

It is proposed to furnish and deliver all materials, tools, equipment, power, tests and transportation, perform all labor, superintendence, and all means of construction, and do all incidental work, and to execute, construct and finish in an expeditious and workmanlike manner, in accordance with the plans and specifications, to the satisfaction and acceptance of the Public Works Department of the City of Reading and of the City Engineer for the total base bid amount of:

IN WITNESS WHEREOF, this proposal has been executed this 16th day of March, 2022, by the setting hereunto of his or its hand and seal.

FOR INDIVIDUAL:

_____(Seal)

FOR CORPORATION:

TELCO, INC.

(Name of Corporation)

By:



(Official Title)
Teddy P. Chung, President

Attest:

Carla A. Waligorski
(~~Secretary~~)

FOR PARTNERSHIP:

(Name of Partnership)

By:

_____(Seal)

_____(Seal)

Partners

NON-COLLUSION AFFIDAVIT

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract pursuant to this bid. According to the Pennsylvania Antibid-Rigging Act, 73 P.S. 1611 et seq., governmental agencies may require Non-Collusion Affidavits to be submitted together with bids.

This Non-Collusion affidavit must be executed by the member, officer, or employee of the bidder who is authorized to legally bind the bidder.

Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the bidder with responsibilities for the preparation, approval, or submission of the bid.

In the case of a bid submitted by a joint venture, each party to the venture must be identified in the bid documents, and an Affidavit must be submitted separately on behalf of each party.

The term "complementary bid" as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of bids higher than the bid of another firm, any intentionally high or noncompetitive bid, and any form of bid submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the bid.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of Pennsylvania

County of Berks

Teddy P. Chung, being first duly sworn, deposes and says that:

He/She is Owner/President

(Owner, Partner, Officer, Representative or Agent)

of Telco, Inc., the Bidder that has submitted the attached Bid or Bids;

He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

Such Bid is genuine and is not a collusive or sham Bid;

Neither the said Bidder nor any of its officers; partners, owners, agents, representatives, employees or parties in interest, including this affidavit, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication of conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any over held, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Reading or any person interested in the proposed Contract;

The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit; and,

Neither the said Bidder nor any of its officers, partners, owners, agents or parties in interest, have any interest, present or prospective, that can be reasonably construed to result in a conflict of interest between them and the City of Reading, which the Bidder will be required to perform.

I state that Telco, Inc. understands
(Name of Firm)

and acknowledges that the above representations are material and important, and will be relied on by the City of Reading in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the City of Reading of the true facts relating to the submission of bids for this contract.



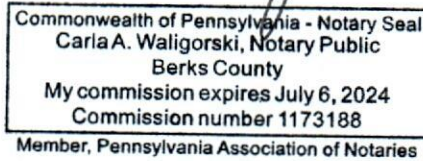
(Name and Company Position)
Teddy P. Chung, President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 16th
DAY OF March, 2022



My Commission Expires July 6, 2024

Notary Public



STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder: Telco, Inc.
2. Permanent main office address: 1224 Cross Keys Road, Reading, PA 19605
3. When organized: March 1983
4. If a corporation, where incorporated: Pennsylvania
5. How many years have you been engaged in the contracting business under your present firm or trade name: 39 Years
6. Contracts on hand: (Schedule these on an attached sheet, showing amount of each contract and the appropriate anticipated dates of completion.) See Attached Sheet
7. Have you ever failed to complete any work awarded to you? If so, where and why?
No
8. Have you ever defaulted on a contract ? No. If so, where and why?
9. List the more important projects recently completed by your company on an attached sheet, stating the approximate cost of each, and the month and year completed. See Attached Sheet
10. List your major equipment available for this contract.
See Attached Sheet
11. Describe experience in construction work similar in importance to this project on an attached sheet.
See Attached Sheet

Statement of Bidder's Qualifications

12. Background and experience of the principal members of your organization, including the officers.

See Attached Sheet

13. Credit available: \$ 400,000

14. Give Bank reference: M & T Bank, 4435 Pottsville Pike, Reading, PA 19605

15. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the City? Yes

16. (A) Have you ever been a party to or otherwise involved in any action or legal proceeding involving matters related to race, color, nationality or religion? No

If so, give full details. _____

- (B) Have you ever been accused of discrimination based upon race, color, nationality or religion in any action or legal proceeding including any proceeding related to any Federal Agency? No. If so, give full details _____
- _____
- _____
- _____

17. All prospective bidders are required to present proof of an acceptable disposal method approved by the Pennsylvania Department of Environmental Resources. The proof may consist of a copy of a State Solid Waste Disposal Permit issued to the prospective bidder by the Pennsylvania Department of Environmental Resources, or a letter of approval from the Pennsylvania Department of Environmental Resources for the use of a proposed or existing disposal facility which has a permit or is under review for a permit. Same to be in accordance with Section 7 (a) application and permits, Pennsylvania Solid Waste Management - "Act 241."

City of Reading
2022 Traffic Signal Repair Project

Telco, Inc.'s Qualification Statement

#6 Contracts on Hand

<u>Project</u>	<u>Contract Amount</u>	<u>Completion Date</u>
Coopersburg WaWa	\$282,174	Apr-22
Lehigh SR 222	\$319,945	Sep-23
Carbon SR 443	\$907,775	Dec-22
City of Harrisburg	\$939,927	Jul-22
Berks SR 183	\$176,650	Jun-22
Allentown Waterfront	\$1,147,062	Jul-22
Minersville Borough	\$191,490	Apr-22
Upper Macungie Township	\$65,142	May-22
Derry Twp-Hershey West End	\$466,350	Dec-22
Northampton-Amazon	\$333,301	Dec-22

#9 Completed Projects

<u>Project</u>	<u>Contract Amount</u>	<u>Date of Completion</u>
Springview Development	\$451,808	Feb-18
Berks SR 662, Fleetwood Boro	\$449,426	Dec-18
City of Lancaster	\$398,747	Dec-18
Lower Nazareth Township	\$526,827	Mar-19
City of Reading	\$1,046,528	Feb-19
Carbon SR 209/Lansford Boro	\$711,436	May-19
West Reading Borough	\$119,523	May-19
St. Lawrence Borough	\$181,460	Jun-19
Wyomissing Borough	\$217,019	Oct-19
Muhlenberg Township	\$156,648	Oct-19
City of Pottsville	\$285,243	Jan-20
Allentown SD	\$109,830	Jul-20
Northampton SR 2020	\$706,047	Jul-20
East Allen Township	\$62,666	Aug-20
Lancaster SR 23	\$775,298	Dec-20
City of Lancaster GLG	\$439,687	Nov-20
Lower Macungie Township	\$46,500	Oct-20
Hellertown Borough	\$60,500	Nov-20
Lehigh SR 0000, Allentown	\$328,717	Sep-20
Collegeville-Royal Farms	\$371,690	Jan-21
Parkland School District	\$230,572	Mar-21
City of Allentown-Gordon St	\$413,728	Mar-21
Hellertown Borough	\$136,040	Jul-21
York Co. SR 2003	\$241,867	Sep-21
Schuylkill SR 924	\$444,702	Aug-21
Upper Macungie-Air Products	\$612,310	Jan-22

#10 Equipment Available

(9) Pick-up Trucks	(2) Loop Trucks	Case Backhoe
(6) 33' Aerial Trucks	(5) Dump Trucks	(3) Ditch Witch Trenchers
(1) 42' Aerial Truck	(3) Line Trucks	(2) Skidsteer Loaders

(3) Freightliners

(2) Vac Trucks

(4) Trailers

Boring Machine

(2) Leroi Air Compressors

JD Mini Excavator

#11 Construction Experience

See #6 and #9

#12 Background & Experience

John C. Hivner, Vice-President

Mr. Hivner has thirty eight years experience. He has "Electronics in Traffic Signals" certification and is also certified as a Level III Traffic Signal Technician by the "IMSA" (International Municipal Signal Association).

Jason M. Shupp, Superintendent

Mr. Shupp has been involved in the actual construction and installation of traffic signalized intersections for twenty years along with all phases of concrete work.

Keith A. Kerper, Foreman

Mr. Kerper has been involved in the actual construction and installation of traffic signalized intersections for ten years along with all phases of concrete work.

Statement of Bidder's Qualifications

18. Name, address, phone number, and contact person at surety company who will provide bonding for this contract:

Jennifer Gohn-Murray Insurance

Washington International Insurance Co

19. Name, address, phone number, and contact person at insurance company who will provide insurance coverage for this contract:

Sarah Smith, Murray Insurance

20. The undersigned hereby authorizes any person, firm or corporation to furnish any information requested by the City of Reading in verification of the recitals comprising this Statement of Bidder's Qualifications.

DATED at Reading, PA this 16th day of March, 20 22.

Telco, Inc. - Teddy P. Chung

(NAME OF BIDDER)

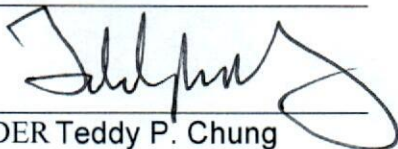
BY: 

TITLE: President

NON DISCRIMINATION STATEMENT

The undersigned hereby certifies that it shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, handicap, familial status, or national origin. The undersigned shall take affirmative action to insure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, handicap, familial status, or national origin.

Telco, Inc.

A handwritten signature in black ink, appearing to read 'Teddy P. Chung', is written over a horizontal line.

BIDDER Teddy P. Chung

President

TITLE

CERTIFICATE OF ACKNOWLEDGMENT OF RECEIPT OF ADDENDUM

THE CITY OF READING

ADDENDUM NO. 1

BID: 2022 Traffic Signal Repair

DUE DATE: March 16, 2022
3:00 P.M. Prevailing Time

This addendum must be signed, attached to, and returned with your proposal to the City of Reading by the time and date indicated ABOVE.

Q1. What is the estimated value?

A1. The estimated cost is \$234,400.00.

Q2. Does this project have an estimate value or sign in sheet from the pre-bid meeting

A2. The pre-bid had 1 bidder listed as Telco. Please see question 1 for value.

Q3. Item # 0951-0130 Is this Mast arm required? Where is it located? Could not find it on any of the intersection plans provided.

A3. The 30 foot mast arm is not being used on the project, no quantity noted.

I, HEREBY CERTIFY THAT THE CHANGES COVERED BY THIS ADDENDUM HAVE BEEN TAKEN INTO ACCOUNT.

Firm Name (Type or Print) Telco, Inc.

Authorized Signature _____

Title President

Name (Type or Print) Teddy P. Chung

Date March 16, 2022

CERTIFICATE OF ACKNOWLEDGMENT OF RECEIPT OF ADDENDUM

THE CITY OF READING

ADDENDUM NO. 2

BID: 2022 Traffic Signal Repair

DUE DATE: March 16, 2022
3:00 P.M. Prevailing Time

This addendum must be signed, attached to, and returned with your proposal to the City of Reading by the time and date indicated ABOVE.

Please be advised the prevailing wage rates are posted on Pennbid and the City of Reading website.
Please sign this document to confirm you have received the wage rates.

I, HEREBY CERTIFY THAT THE CHANGES COVERED BY THIS ADDENDUM HAVE BEEN TAKEN INTO ACCOUNT.

Firm Name (Type or Print) Telco, Inc.

Authorized Signature _____

Title President

Name (Type or Print) Teddy P. Chung

Date March 16, 2022

2022 TRAFIC SIGNAL REPAIR PROJECT

DEPARTMENT OF PUBLIC WORKS

CITY OF READING, PENNSYLVANIA



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NOTICE AND INSTRUCTIONS

CITY OF READING, PENNSYLVANIA

NOTICE TO CONTRACTORS

The City of Reading will receive separate bids for 2022 Traffic Signal Repair Project submitted electronically via the PennBid Program (www.pennbid.net). Proposals shall be received until 3:00 P.M., prevailing time on March 16, 2022, at which time the proposal shall be publicly opened and read aloud in the Purchasing office 815 Washington Street, Reading, Pennsylvania 19601. Proposers are invited to be present at the Bid opening.

Proposals received via www.pennbid.net after the hour specified will not be considered. Proposers are invited to be present at the Bid opening.

Specifications and bid forms, upon which all bids must be submitted, can be obtained via Pennbid (www.pennbid.net).

Each proposal shall be accompanied by bid surety in the amount of ten percent (10%) of the proposal. A certified check or bid bond will be accepted.

Attention is called to the fact that prevailing minimum wage rates as determined by the Secretary of the Department of Labor and Industry must be paid by the contractor and that employees shall not be discriminated against because of race, color, age religion, sex or national origin.

The City of Reading reserves the right to accept or reject any or all bids, and to accept or reject any part of a bid that may not be in the public interest.

Tammi Reinhart
Purchasing Coordinator

INSTRUCTIONS TO BIDDERS

PROPOSAL SUBMISSION

Proposals shall be submitted via the PennBid Program (www.pennbid.net).

This shall be submitted on or before the time stated in the NOTICE TO CONTRACTORS.

Proposals received via PennBid after the hour specified will not be considered. Proposers are invited to be present at the Bid opening.

BONDS

Bid security, in the amount of ten percent (10%) of the bid price shall accompany each proposal. This bid security may be a Certified or Cashier's Check, or a bid bond furnished by a surety company, satisfactory to the City of Reading. The Contractor shall furnish a performance bond in an amount equal to one hundred percent (100%) of the Contract Sum as security for the faithful performance of this Contract and also a labor and material payment bond in an amount not Less than one hundred percent (100%) of the Contract Sum as security for the payment of persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract. The successful bidder, upon award of contract, shall furnish at the time of execution of the same, a Maintenance Bond by a surety company acceptable to the City of Reading, in an amount equal to one hundred percent (100%) of the contract, to guarantee satisfactory performance. All bonds are subject to approval by the City Solicitor.

Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

The bonds shall be executed on the forms provided in the Bid Documents. The bonds shall be executed by a corporate surety licensed and qualified to do business in the Commonwealth of Pennsylvania. The surety company shall be named in the current list of companies holding certificates of authority as accepted sureties on federal bonds and as acceptable re-insuring companies as published in Circular 570 (as amended) by the audit staff, Bureau of Government Financial Operations, U.S. Treasury Department, and the amount of the bonds shall not exceed the underwriting risk of such surety as set forth in said Circular or revision thereof. The bonds shall be accompanied by a current and certified power of attorney evidencing the authority of the agent of the surety to execute the bonds as of the date of the bonds.

In case the contract is awarded to a bidder who fails to enter the contract or to deliver all required bonds and affidavits, the cash or check deposited shall become absolute property of the City; or if a bond has been deposited, it shall become payable immediately. Cash, checks or bonds deposited will be returned to unsuccessful bidders as soon as the contract is awarded, or all bids rejected.

INSURANCE

The Contractor, at the time of execution of the contract, shall also furnish the City with insurance certificates of adequate limits, as later indicated, to protect the City of Reading, its agents, and employees from any litigation involving Workers' Compensation, Public Liability and Property Damage, involved in the work. All subcontractors must also furnish copies of their liability insurance and Workers' Compensation Insurance certificates to the City. The City will allow no subcontractor to perform any work under this contract unless such certificates are submitted to and approved by the City beforehand.

CONTRACTOR'S LIABILITY INSURANCE

The status of the Contractor in the work to be performed by the Contractor is that of any independent Contractor and as such, he shall properly safeguard against any and all injury or damage to the public, to public and private property, materials and things, and as such he alone shall be responsible for any and all damage, loss or injury to persons or property that may arise, or be incurred, in or during the conduct or progress of said work without regard to whether or not the Contractor, his sub-contractors, agents, or employees have been negligent, and the Contractor shall keep the City free and discharged of and from any and all responsibility and liability therefore of any sort or kind. The Contractor shall assume all responsibility for risks or casualties of every description, for any or all damage, loss or injury to persons or property arising out of the nature of the work from the action of the elements, or from any unforeseen or unusual difficulty. The Contractor shall assume and be liable for all blame and loss of whatsoever nature by reason of neglect or violation of any Federal, State, County or Local laws, regulations, or ordinances; the Contractor shall indemnify and save harmless the City from all suits or actions of law of any kind whatsoever in connection with this work and shall if required by the City, produce evidence of settlement of any such action before final payment shall be made by the City. Contractor's Liability Insurance Certificate shall include the save harmless clause and shall be filed with the City.

The Contractor shall maintain such insurance as will protect him from claims under worker's compensation acts and from claims for damages because of bodily injury, including death, and property damage, which may arise from and during operations under this Contract, whether such operations be by himself, by any subcontractor or anyone directly or indirectly employed by either of them. Contractor's liability insurance shall be in the names of the Contractor and the City, as their respective interests may appear. Certificates of such insurance shall be filed with the City Risk and Safety Manager.

The minimum amount of liability insurance to be maintained by the Contractor during the life of the contract shall be as follows:

Comprehensive General Liability – for bodily injury and property damage – including any liability normally covered by a general liability policy with limits of not less than \$1,000,000 per occurrence and \$2,000,000 in the annual aggregate.

Business Automobile Liability – For owned, non-owned, leased and hired vehicles with a combined single limit of not less than \$1,000,000 for bodily injury and property damage.

Worker's Compensation – Statutory limits in each state in which Service Provider is required to provide Worker's Compensation coverage including "All States" and "Voluntary Compensation" endorsement, and a Waiver of Subrogation endorsement in favor of the County.

Prior to commencement of performance of this Agreement, Contractor shall furnish to the City a certificate of insurance evidencing all required coverage in at least the limits required herein, **naming the City of Reading, its elected officials, agents, and employees as additional insureds under the Comprehensive General Liability coverage**, and providing that no policies may be modified or cancelled without thirty (30) days advance written notice to the City. Such certificate shall be issued to: *City of Reading, 815 Washington Street, Reading, PA 19601*. All policies shall be in effect with companies holding an A.M. Best rating of "A-" or better and shall be licensed to do business in the Commonwealth of Pennsylvania. Such companies shall also be acceptable to the City.

Please forward a certificate of insurance verifying these insurance requirements.

Liability insurance shall include automobile coverage, including "hired automobiles and non-ownership automobiles."

Liability insurance shall include the hazard of collapse, damage to underground utilities, underground blasting, and excavation. Prior to any blasting which may be required, blasting insurance shall be obtained by the Contractor in an amount satisfactory to the City Engineer.

Liability insurance shall include the hazard of building collapse and of damage to adjoining properties and/or to individuals located within or adjacent to each project site.

All subcontractors performing work under this contract must furnish to the City a copy of their Certificate of Insurance for Workers' Compensation and liability for bodily injury and property damage.

WAGES AND EMPLOYMENT REQUIREMENTS

Each bidder shall include in the proposal a statement that not less than the Pennsylvania prevailing wages will be paid if the work requires construction other than maintenance work as defined by the PA Department of Labor.

EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Contract, the Contractor agrees as follows:

The Contractor will not discriminate against any employees or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices that may be provided by the City setting forth the provisions of this nondiscrimination clause.

The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representatives of the Contractor, commitments under this Section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

In the event of the Contractor's noncompliance with the non-discrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts.

The Contractor will include the provisions of these paragraphs in every subcontract or purchase order unless exempted.

EMPLOYMENT OF CERTAIN PERSONS PROHIBITED

No person who, at the time, is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.

SUPERVISION OF WORKERS

The Contractor shall provide qualified supervision of each crew at all times while working under this contract. Each supervisor shall be authorized by the Contractor to accept and act upon all directives issued by the City. Failure for the supervisor to act on said directives shall be sufficient cause to give notice that the Contractor is in default of the contract unless such directives would create potential personal injury or safety hazards.

This contract will be under the direct supervision of the City or its authorized representatives. Any alterations or modifications of the work performed under this contract shall be made only by written agreement between the Contractor and the City authorized representatives and shall be made prior to commencement of the altered or modified work. No claims for extra work or materials shall be allowed unless covered by written agreement.

SUBCONTRACTS

The Contractor will not be allowed to subcontract work under this contract unless the City grants written approval. The Subcontractor, as approved, shall be bound by the conditions of the contract between the City and the Contractor. The authorization of a Subcontractor is to perform in accordance with all terms of the contract and specifications. All required notices, work orders, directives, and requests for emergency services will be directed to the Contractor. All directions given to the Subcontractor in the field shall bind the Contractor as if the notice had been given directly to the Contractor.

QUALITY

Where the specification asks for a certain article or "Approved Equal" and the bidder intends to furnish an article which the bidder considers equal to the one named, the bidder must specify in the bid the name and grade of said article. All disputes concerning grade and quality of materials or work shall be determined by a person duly authorized by the Director of Public Works.

TIME OF COMPLETION

The bidders are herewith cautioned that they must comply with the time of completion indicated in the technical specifications. To insure timely completion, the successful bidder will be required to furnish adequate equipment and qualified personnel in sufficient numbers at all times.

Where a date is set for delivery of materials or the performance of work, said materials must be delivered or work performed, in accordance with the specifications or description herein contained on or before said date, or the order to the delinquent party will be cancelled and awarded to the next lowest responsible bidder.

BUSINESS PRIVILEGE TAX

The City of Reading imposes a Business Privilege License, at \$55.00 per calendar year. In addition, a Business Privilege Tax is imposed at the rate of 2¼ mills upon the gross receipts attributable to business conducted within the City of Reading.

PERMITS/LICENSES

The Contractor shall, at his/her expense, pay all fees and procure all necessary licenses and permits needed to conduct the work required under the terms of this contract. The Contractor shall give any and all necessary formal notices required in conjunction with the lawful prosecution of the work of this contract.

BASIS OF PAYMENT

All prices to be quoted F.O.B. Reading, PA destination. The City of Reading is tax exempt.

OBSERVANCE OF LAWS, ORDINANCES AND REGULATIONS

The Contractor at all times during the term of this contract shall observe and abide by all Federal, State, and Local laws which in any way affect the conduct of the work and shall comply with all decrees and orders of courts of competent jurisdiction. The Contractor shall comply fully and completely with any and all applicable State and Federal statutes, rules and regulations as they relate to hiring, wages and any other applicable conditions of employment.

PRE-BID MEETING (if specified)

A virtual pre-bid meeting has been scheduled for February 17, 2022 at 10:00 am for this project and will be on zoom. A link will be posted in Pennbid for the zoom meeting. For the purpose of familiarizing Bidders with the project, answering questions, and issuing addenda as needed for clarification of the bidding document, all questions shall be submitted via the PennBid Program (www.pennbid.net) by 2:00 PM, February 28, 2022, with an addendum being issued on, March 4, 2022.

WITHDRAWAL OF PROPOSALS/BIDS

After a bid has been opened, it may not be withdrawn except as provided by Act of January 23, 1974, P.L. 9 No. 4 as same may be amended.

No bids may be withdrawn for a period of ninety (90) days following the formal opening and receipt of bids by the City of Reading.

BID REJECTION

The City of Reading reserves the right to reject any or all bids and to accept or reject any part of any bid. It also reserves the right to waive any technical defects or minor irregularities, which in its discretion, is determined to be in the best interest of the City.

EXECUTION OF CONTRACT

The successful Bidder shall, within ten (10) calendar days after mailing of contract documents by the City to the Principal, enter into contract with the City on form as included within the bidding documents for the appropriate bonds, indemnities and insurances required hereunder.

The contract, when executed, shall be deemed to include the entire agreement between the parties; the Contractor shall not base any claim for modification of the contract upon any prior representation or promise made by the representatives or the City, or other persons.

All attachments are considered as part of this document.

METHOD OF PAYMENT

Payments shall be based on an invoice submitted by the General Contractor or approved representative (Construction Manager). The City shall have the right to withhold disbursement funds if in the City's opinion the construction work for which payment has been requested is of poor workmanship, contrary to any applicable codes and contract specifications, is in violation of appropriate paperwork requirements that are not up to date and approved for this billing period, General Contractor fails to comply with this Agreement, or for other conditions or circumstances which the City deems not to be in the best interest of the public. Ten percent (10%) of each General Contractor invoice request shall be retained by the City on this contract until it is completed up to City codes and contract specifications and approved by a City Official or person representing a City Official (Architect or Engineer).

ACCESS TO ACCOUNTING RECORDS

The contractor shall certify that all materials, equipment and labor charged to the City are accounted for and shall keep such full and detailed accounts as may be necessary for proper financial management under this Agreement. The City or its representative shall be afforded access to all the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to this contract, and the Contractor shall preserve all such records for a period of three (3) years, or for such longer period as may be required by law, after the final payment.

ASSIGNMENT OF REFUND RIGHTS

The City is not subject to federal, state or local sales or use tax or federal excise tax. Contractor hereby assigns to City all of its rights, title, and interest in any sales or use tax which may be refunded as a result or the purchase of any materials purchased in connection with the contract and contractor, unless directed by City, shall not file a claim for any sales or use tax refund subject to this assignment. Contractor authorizes City, in its own name or the name of contractor, to file a claim for a refund of any sales or use tax subject to this assignment.

CONTRACTS WITH SUBCONTRACTORS

The Contractor agrees to include the above references paragraphs in any contracts with subcontractors.

NOTICE TO PROCEED

The Contractor shall begin work on the job site within ten (10) days after receiving Notice to Proceed from the City.

DISCONTINUANCE OF WORK

The Contractor upon receipt of either written or oral notice to discontinue such practice shall immediately discontinue any practice obviously hazardous as determined by the City.

CONTRACT TERMINATION

The City shall have the right to terminate a contract or a part thereof before the work is completed in the event:

1. Previous unknown circumstances arise making it desirable in the public interest to void the contract.
2. The contractor is not adequately complying with the specifications.
3. The contractor refuses, neglects, or fails to supply properly trained or skilled supervisory personal and/or workers or proper equipment.
4. The contractor in the judgment of the City is unnecessarily or willfully delaying the performance and completion of the work.
5. The contractor refuses to proceed with work when and as directed by the City.
6. The contractor abandons the work.

DOCUMENTS TO BE SUBMITTED WITH BID

PROPOSAL
FOR
2022 TRAFFIC SIGNAL REPAIR PROJECT
CITY OF READING, PENNSYLVANIA

Proposal of

(name)

(address)

TO: Mayor Eddie Moran
City of Reading
815 Washington Street
Reading, PA 19601

Dear Mayor Moran:

In conformity with City Plans and specifications, all as prepared by the Public Works Department and after an examination of the site of the work, and the Contract Documents, including the instructions to Bidders, Form of Proposal, Bid Bond and Conditions, the undersigned submits this proposal, and encloses herewith as proposal guaranty, a Certified or Treasurer's Check, or Bid Bond, in an amount not less than ten percent (10%) of the bid herein submitted, which it is understood will be forfeited if this proposal is accepted by the City of Reading, and the undersigned fails to furnish approved bonds and execute the contract within the time stipulated; otherwise, the guarantee will be returned.

The undersigned declares that no Member of Council, Director of Department, Division Manager, deputy thereof or clerk therein, or other officer of the City of Reading, is directly or indirectly interested as principal, surety or otherwise in this proposal or has any supervision or overall responsibility for the implementation in administration of the contract.

It is certified that the undersigned is the only person(s) interested in this proposal as principal and that the proposal is made without collusion with any person, firm, or corporation.

It is hereby agreed to execute the contract and furnish surety company bonds, on the forms enclosed in the Contract Documents, in the amount of one hundred percent (100%) of the contract price within ten (10) days of mailing of the contract documents from the City to the Principal, and to begin work within ten (10) days after receipt of Notice to Proceed from the City of Reading.

It is proposed to furnish and deliver all materials, tools, equipment, power, tests and transportation, perform all labor, superintendence, and all means of construction, and do all incidental work, and to execute, construct and finish in an expeditious and workmanlike manner, in accordance with the plans and specifications, to the satisfaction and acceptance of the Public Works Department of the City of Reading and of the City Engineer for the total base bid amount of:

IN WITNESS WHEREOF, this proposal has been executed this ____ day of _____, 20 __, by the setting hereunto of his or its hand and seal.

FOR INDIVIDUAL:

_____(Seal)

FOR CORPORATION:

(Name of Corporation)

By:

Attest:

(Official Title)

(Secretary)

FOR PARTNERSHIP:

(Name of Partnership)

By:

_____(Seal)

_____(Seal)

Partners

FORM OF BID BOND

2022 TRAFFIC SIGNAL REPAIR PROJECT

BOND

KNOW ALL MEN BY THESE PRESENTS that we, the undersigned, _____
_____, as Principal (the "Principal"), and _____
_____ a corporation organized and existing under laws
of the _____ of _____, as Surety (the "Surety"), are held and firmly bound
unto _____ as Obligee (the "Obligee"), as hereinafter set
forth, in the full and just sum of _____ Dollars (\$_____), lawful money of the
United States of America, for the payment of which sum we bind ourselves, our heirs, administrators,
executors, successors and assigns, jointly and severally, firmly by these presents.

WITNESSETH THAT:

WHEREAS, the Principal herewith is submitting a Proposal to the Obligee to perform the Work
in connection with the construction of _____
_____ pursuant to plans, specifications and other documents constituting the Contract Documents which are
incorporated into said Proposal by reference (the "Contract Documents"), as prepared by the Department
of Public Works, City Hall, 815 Washington Streets, Reading, PA 19601.

WHEREAS, it is a condition of the receipt and consideration by the Obligee of said Proposal that
it shall be accompanied by proposal guaranty to be held by the Obligee on terms hereinafter set forth.

NOW, THEREFORE, the condition of this Bond shall be such that, if the Principal, within ten (10)
days after mailing of contract document by the City to Principal, shall furnish to the Obligee a Performance
Bond and a Payment Bond upon award of a contract to him by the Obligee, shall execute and deliver the
Agreement and furnish to the Obligee proper evidence of effectiveness of insurance coverage, respectively
within the time, in the forms and in the amounts, as appropriate, required by the Contract Documents, then
this Bond shall be void, otherwise, this Bond shall remain in full force and effect.

The Principal and the Surety agree to pay to the Oblige the difference between the amount of said Proposal, as accepted by the Oblige, and any higher amount for which the required work shall be contracted for by the Oblige, together with any additional advertising costs, architect's fees, legal fees and any all other fees and expenses incurred by the Oblige by reason of the failure of the Principal to enter into such Agreement with the obligee, or to furnish such Contract Bonds, or to furnish evidence of effectiveness of such insurance coverage; provided, however, that (1) the obligation of the Surety shall not exceed the stated principal amount of this Bond; and (2) if the Oblige should not procure an executed contract with any other person for the performance of the work contemplated in said Proposal, as accepted by the Oblige, upon the same terms and conditions, other than price, as provided in the Contract Documents, within the period provided in the Contract Documents during which no proposals of bidders may be withdrawn, whether because of the lack of other proposals, or because of the inability or refusal of any other bidder to enter into an appropriate contract, or because the cost under any higher proposal would be greater than the Oblige shall determine, in its sole discretion, that it can afford, then the Principal and the Surety agree to pay to the Oblige the full amount of this Bond as liquidated damages.

IN WITNESS WHEREOF, the Principal and the Surety cause this Bond to be signed, sealed and delivered this _____ day of _____, 20__.

(INDIVIDUAL PRINCIPAL)

_____(Seal)
(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

_____(Seal)
(Name of Partnership)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

(CORPORATION PRINCIPAL)

Attest:

(Secretary)

(Name of Corporation)

2. By: _____
(President/Vice President)

(CORPORATE SEAL)

or (if appropriate)

(Name of Corporation)

3. By: _____
4. Authorized Representative

*Attach appropriate proof, dated as of the same date as the Bond, evidencing authority to execute in behalf of the corporation.

Signed _____

(Title)

Subscribed and sworn to before me on

this ____ day of _____, 20 ____

(Title)

My commission expires:

(CORPORATION SURETY)

(Name of Corporation)

By: _____
** (Attorney-in-fact)

Witness:

(Corporate Seal)

**Attach an appropriate power of attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

NON-COLLUSION AFFIDAVIT

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract pursuant to this bid. According to the Pennsylvania Antibid-Rigging Act, 73 P.S. 1611 et seq., governmental agencies may require Non-Collusion Affidavits to be submitted together with bids.

This Non-Collusion affidavit must be executed by the member, officer, or employee of the bidder who is authorized to legally bind the bidder.

Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the bidder with responsibilities for the preparation, approval, or submission of the bid.

In the case of a bid submitted by a joint venture, each party to the venture must be identified in the bid documents, and an Affidavit must be submitted separately on behalf of each party.

The term "complementary bid" as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of bids higher than the bid of another firm, any intentionally high or noncompetitive bid, and any form of bid submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the bid.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

He/She is _____
(Owner, Partner, Officer, Representative or Agent)
of _____, the Bidder that has submitted the
attached Bid or Bids;

He/She is fully informed respecting the preparation and contents of the attached Bid and of all
pertinent circumstances respecting such Bid;

Such Bid is genuine and is not a collusive or sham Bid;

Neither the said Bidder nor any of its officers; partners, owners, agents, representatives, employees or
parties in interest, including this affidavit, has in any way colluded, conspired, connived or agreed, directly
or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with
the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with
such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or
communication of conference with any other Bidder, firm or person to fix the price or prices in the attached
Bid or of any other Bidder, or to fix any over held, profit or cost element of the Bid price or the Bid price
of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement
any advantage against the City of Reading or any person interested in the proposed Contract;

The price or prices quoted in the attached Bid are
fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the
part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including
this affidavit; and,

Neither the said Bidder nor any of its officers,
partners, owners, agents or parties in interest, have any interest, present or prospective, that can be
reasonably construed to result in a conflict of interest between them and the City of Reading, which the
Bidder will be required to perform.

I state that _____ understands

(Name of Firm)

and acknowledges that the above representations are material and important, and will be relied on by the City of Reading in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the City of Reading of the true facts relating to the submission of bids for this contract.

(Name and Company Position)

SWORN TO AND SUBSCRIBED

BEFORE ME THIS _____

DAY OF _____, 20____

Notary Public

My Commission Expires

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder:_____
2. Permanent main office address:_____
3. When organized:_____
4. If a corporation, where incorporated:_____
5. How many years have you been engaged in the contracting business under your present firm or trade name:_____
6. Contracts on hand: (Schedule these on an attached sheet, showing amount of each contract and the appropriate anticipated dates of completion.)
7. Have you ever failed to complete any work awarded to you? If so, where and why?

8. Have you ever defaulted on a contract ? _____. If so, where and why?

9. List the more important projects recently completed by your company on an attached sheet, stating the approximate cost of each, and the month and year completed.
10. List your major equipment available for this contract.

11. Describe experience in construction work similar in importance to this project on an attached sheet.

Statement of Bidder's Qualifications

12. Background and experience of the principal members of your organization, including the officers.

13. Credit available: \$_____

14. Give Bank reference:_____

15. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the City? _____

16. (A) Have you ever been a party to or otherwise involved in any action or legal proceeding involving matters related to race, color, nationality or religion?_____

If so, give full details. _____

- (B) Have you ever been accused of discrimination based upon race, color, nationality or religion in any action or legal proceeding including any proceeding related to any Federal Agency? _____. If so, give full details _____

17. All prospective bidders are required to present proof of an acceptable disposal method approved by the Pennsylvania Department of Environmental Resources. The proof may consist of a copy of a State Solid Waste Disposal Permit issued to the prospective bidder by the Pennsylvania Department of Environmental Resources, or a letter of approval from the Pennsylvania Department of Environmental Resources for the use of a proposed or existing disposal facility which has a permit or is under review for a permit. Same to be in accordance with Section 7 (a) application and permits, Pennsylvania Solid Waste Management - "Act 241."

Statement of Bidder's Qualifications

18. Name, address, phone number, and contact person at surety company who will provide bonding for this contract:

19. Name, address, phone number, and contact person at insurance company who will provide insurance coverage for this contract:

20. The undersigned hereby authorizes any person, firm or corporation to furnish any information requested by the City of Reading in verification of the recitals comprising this Statement of Bidder's Qualifications.

DATED at _____ this _____ day of _____, 20 ____.

(NAME OF BIDDER)

BY: _____

TITLE: _____

NON DISCRIMINATION STATEMENT

The undersigned hereby certifies that it shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, handicap, familial status, or national origin. The undersigned shall take affirmative action to insure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, handicap, familial status, or national origin.

BIDDER

TITLE

CONTRACT DOCUMENTS

C O N T R A C T

NOTE; This contract is not to be filled in until contract is awarded.

THIS AGREEMENT, made and concluded this _____ day of _____, in the year two thousand and _____, by and between the City of Reading, a municipal corporation of the Commonwealth of Pennsylvania, located in the County of Berks, said Commonwealth, party of the first part, and _____, Contractor, party of the second part, pursuant to law and to the provisions and requirements of the ordinance of the City of Reading, Pennsylvania.

WITNESSETH, that the parties to these presents, each in consideration of the agreements on the part of the other herein contained, have agreed, and hereby do agree, the party of the first part for itself, its successors and assign, and the party of the second part for itself, himself, or themselves, its successors, or his or their executors and administrators as follows:

CONTRACTOR'S GENERAL AGREEMENT. The Contractor covenant, promises and agrees to and with the party of the first part, for the consideration hereinafter mentioned and contained, and under the penalty expressed in a bond bearing date of _____ and hereto attached, to furnish all the material, machinery, equipment, tools, labor and transportation, except as hereinafter otherwise provided, at his own cost, necessary or proper for the purpose of executing the work embraced in this contract in a good, substantial and workmanlike manner, and in strict accordance with the specifications pertaining to this contract a herein contained.

PARTS OF CONTRACT. The Location Map; Notice to Contractors; Bid Instructions; Documents to be Submitted with Bid; Contract Documents; Documents to be Submitted During the Course of the Contract; Wage Rate Determinations; Notice of Preconstruction Requirements and Pre-Construction Conference Questionnaire; Affirmative Action Requirements; General Provisions; Supplementary General Terms and Conditions; Technical Specifications; Supplementary Technical Specifications; and Correspondence and Supportive Documentation shall each form a part of the Contract.

THE CONTRACT SUM. The City shall pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, in current funds as follows:_____

_____ (state here the lump sum amount, unit prices, or both as desired in individual cases.)

Where the quantities originally contemplated are so changed that application of the agreed unit price to the quantity of work performed is shown to create a hardship to the Owner or the Contractor, there shall be an equitable adjustment of the Contract to prevent such hardship.

TIME & MANNER OF DOING WORK. The party of the second part agrees to commence the construction of the work to be done under this contract, immediately upon receiving written notice from the Director of Public Works, or other Reading Police Department so to do and to complete the entire work not later than _____December 31, 2022_____, it being expressly agreed and understood that the time of beginning, rates of progress and time of completion of the work are essential under this contract. Time is to be considered to be the essence of this contract.

STIPULATED DAMAGES. The Contractor shall begin work within ten (10) days of receipt of written notice from the applicable Director, to do so. If the Contractor fails to complete and finish the work in conformity with the terms and provisions of this Contract within the time hereinbefore specified, he shall pay to the City the sum of **Five Hundred Dollars (\$500.00)** for each and every day thereafter, including Sundays and holidays, that the finishing of the Contract is delayed, which sum shall be construed as stipulated and liquidated damages and not as a penalty and shall be deducted from the amount due by the terms of the Contract; provided, however, that in case of justifiable delay, the City shall extend the time for completion of said work as provided for in Article G.7, but no extension of time for any reason beyond the time fixed herein for the completion of the work shall be deemed a waiver by the City of the right to abrogate this Contract for abandonment for delay.

LIENS. Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lien thereof, and, if required in either case, an affidavit that so far as he has knowledge or information the release and receipts include all the labor and material for which a lien could be filed. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the City all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

BASIS OF CONTRACT. This contract is founded on _____

IN WITNESS WHEREOF, the said City of Reading has caused this Agreement to be executed by its Mayor, and its corporate seal to be hereunto affixed, duly attested by its City Clerk, and the party of the second part.

the day and year first above written.

CITY OF READING

By: _____
Mayor

ATTEST:

City Clerk

Signed and Sealed in the Presence of

CONTRACTOR

PRESIDENT

SECRETARY

5. PERFORMANCE BOND

Know All Men By These Presents that we, _____
(CONTRACTOR)

hereinafter called the PRINCIPAL, and _____
(SURETY)

hereinafter called the SURETY, a corporation organized and existing under the laws of
the _____ are held and firmly bound
unto _____ hereinafter called the OBLIGEE, as hereinafter set forth,

in the full and just sum of _____ Dollars (\$ _____), lawful money of
the United States of America, for the payment of which sum we bind ourselves, our heirs, executors,
administrators, successors and assigns, jointly and severally, firmly by these presents.

WITNESSETH THAT:

WHEREAS, the PRINCIPAL heretofore submitted to the OBLIGEE a certain PROPOSAL, dated
_____, 20____, to perform the WORK for the OBLIGEE, in connection with the
_____ as set forth in
CONTRACT DOCUMENTS.

WHEREAS, the OBLIGEE is a "contracting body" under provisions of Act No. 385 of the General
Assembly of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967,
known and cited as the "Public Works Contractors Bond Law of 1967" (the "Act"); and

WHEREAS, the Act, in Section 3(a), requires that, before an award shall be made to the PRINCIPAL by
the OBLIGEE in accordance with the PROPOSAL, the PRINCIPAL shall furnish this BOND to the
OBLIGEE, with this BOND to become binding upon the award of the CONTRACT to the PRINCIPAL
by the OBLIGEE in accordance with the PROPOSAL; and

WHEREAS, it also is a condition of the CONTRACT DOCUMENTS that this BOND shall be furnished
by the PRINCIPAL to the OBLIGEE; and

WHEREAS, under the CONTRACTOR DOCUMENTS, it is provided inter alia, that if the PRINCIPAL
shall furnish this BOND to the OBLIGEE, and if the OBLIGEE shall make an award to the PRINCIPAL,
in accordance with the PROPOSAL, then the PRINCIPAL and OBLIGEE shall enter into a CONTRACT
with respect to performance of the WORK, the form of which CONTRACT is set forth in the CONTRACT
DOCUMENTS.

NOW, THEREFORE, the terms and conditions of this BOND are and shall be that if the PRINCIPAL will truly and faithfully comply with and perform the WORK in accordance with the CONTRACT DOCUMENTS, at the time and in the manner provided in the CONTRACT DOCUMENTS, and if the PRINCIPAL shall satisfy all claims and demands incurred in or related to the performance of the WORK by the PRINCIPAL, and if the PRINCIPAL shall indemnify completely and shall hold harmless the OBLIGEE and all of its officers, agents and employees from any and all costs and damages which the OBLIGEE and all of its officers, agents and employees may sustain or suffer by reason of the failure of the PRINCIPAL to do so, and if the PRINCIPAL shall reimburse completely and shall pay to the OBLIGEE any and all costs and expenses which the OBLIGEE and all of its officers, agents or employees may incur by reason of any such default or failure of the PRINCIPAL, then this BOND shall be void; otherwise, this BOND shall remain in force and effect.

This BOND, is executed and delivered under and subject to the Act, to which reference hereby is made.

The PRINCIPAL and the SURETY agree that any alterations, changes and/or additions to the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the WORK to be performed in accordance with the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the CONTRACT , and/or any giving by the OBLIGEE of any extensions of time for the performance of the WORK in accordance with the CONTRACT DOCUMENTS, and/or any act of forbearance of either the PRINCIPAL or the OBLIGEE toward the other with respect to the CONTRACT DOCUMENTS, and/or the reduction of any percentage to be retained by the OBLIGEE as permitted by the CONTRACT DOCUMENTS, shall not release, in any manner whatsoever, the PRINCIPAL and the SURETY, or either of them, or their heirs, executors, administrators, successors and assigns, from liability and obligations under this BOND; and the SURETY, for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

IN WITNESS WHEREOF, the PRINCIPAL and the SURETY cause this BOND to be signed, sealed and delivered this _____ day of _____, 20____.

(INDIVIDUAL PRINCIPAL)

_____(Seal)
(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

_____(Seal)
(Name of Partnership)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

(CORPORATION PRINCIPAL)

Attest:

(Secretary)

(Name of Corporation)

1. By: _____
(President/Vice President)

(CORPORATE SEAL)

or (if appropriate)

(Name of Corporation)

2. By: _____
3. Authorized Representative

*Attach appropriate proof, dated as of the same date as the Bond, evidencing authority to execute in behalf of the corporation.

Signed _____

(Title)

Subscribed and sworn to before me on

this ____ day of _____, 20 ____

(Title)

My commission expires:

(CORPORATION SURETY)

(Name of Corporation)

By: _____
 ** (Attorney-in-fact)

Witness:

(Corporate Seal)

**Attach an appropriate power of attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

6. PAYMENT BOND

Know All Men by These Presents:

That We, _____ hereinafter called the PRINCIPAL, and _____
(CONTRACTOR)

_____ hereinafter called the SURETY, a corporation organized and
(SURETY)

existing under the laws of the _____ of _____ are held and firmly
bound unto _____, hereinafter called OBLIGEE, as hereinafter

(OBLIGEE)

set forth, in the full and just sum of _____ Dollars (\$ _____),
lawful money of the United States of America, for the payment of which we bind ourselves, our heirs,
executors, administrators, successors and assigns, jointly and severally, firmly by these presents:

Witnesseth That:

WHEREAS, the PRINCIPAL heretofore submitted to the OBLIGEE a certain PROPOSAL, dated
_____, 20 ____ to perform the WORK for the OBLIGEE, in connection with the
_____ as set forth in the
CONTRACT DOCUMENTS;

WHEREAS, the OBLIGEE is a "contracting body" under provisions of the Act of the General Assembly
of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967, known as and
cited as the "Public Works Contractors" Bond Law of 1967", P L 869 (the Act"): and

WHEREAS, the Act, in section 3(a), requires that, before an award shall be made to the PRINCIPAL by
the OBLIGEE in accordance with the PROPOSAL, the PRINCIPAL shall furnish this BOND to the
OBLIGEE, with this BOND to become binding upon the award of a CONTRACT to the PRINCIPAL by
the OBLIGEE in accordance with the PROPOSAL: and

WHEREAS, it also is a condition of the CONTRACT DOCUMENTS that this BOND shall be furnished
by the PRINCIPAL to the OBLIGEE; and

WHEREAS, under the CONTRACTOR DOCUMENTS, it is provided, inter alia, that if the PRINCIPAL
shall furnish this BOND to the OBLIGEE, and if the OBLIGEE shall make an award to the PRINCIPAL
in accordance with the PROPOSAL then the PRINCIPAL and the OBLIGEE shall enter into a
CONTRACT with respect to performance of the WORK, the form of which CONTRACT is set forth in
the CONTRACT DOCUMENTS.

NOW, THEREFORE, the terms and conditions of this BOND are and shall be that if the PRINCIPAL and
any SUBCONTRACTOR of the PRINCIPAL to whom any portion of the WORK shall be subcontracted,
and if all assignees of the PRINCIPAL and of any such SUBCONTRACTOR, promptly shall pay or shall
cause to be paid, in full all money which may be due any claimant supplying labor or materials in the
prosecution and performance of the WORK in accordance with the CONTRACT

DOCUMENTS, including any amendment, extension or addition to the CONTRACT DOCUMENTS, for material furnished or labor supplied or labor performed, then this BOND shall be void; otherwise, this BOND shall be and shall remain in force and effect.

This BOND, as provided by the Act, shall be solely for the protection of claimants supplying labor or materials to the PRINCIPAL or to any SUBCONTRACTOR of the PRINCIPAL in the prosecution of the WORK covered by the CONTRACT DOCUMENTS, including any amendment, extension or addition thereto. The term "claimant", where used herein and as required by the Act, shall mean any individual, firm, partnership, association or corporation. The phrase "labor or materials", when used herein and as required by the Act, shall include public utility services and reasonable rentals of equipment, but only for periods when the equipment rented is actually used at the site of the WORK covered by the CONTRACT. As required by the Act, the provisions of this BOND shall be applicable whether or not the material furnished or labor performed enters into and becomes a component part of the public building, public work or public improvement contemplated by the CONTRACT DOCUMENTS.

As provided and required by the Act, the PRINCIPAL and the SURETY agree that any claimant, who has performed labor or furnished material in the prosecution of the WORK in accordance with the CONTRACT DOCUMENTS, including any amendment, extension or addition to the CONTRACT DOCUMENTS, and who has not been paid therefore, in full, before the expiration of ninety (90) days after the last day on which such claimant performed the last of such labor or furnished the last of such materials for which payment is claimed, may institute an action upon this BOND, in the name of the claimant, in assumpsit, to recover any amount due the claimant for such labor or material, and may prosecute such action to final judgment and may have execution upon the judgment; provided, however, that:

(a) Any claimant who has a direct contractual relationship with any SUBCONTRACTOR of the PRINCIPAL, but has no contractual relationship, express or implied, with the PRINCIPAL, may institute an action upon this BOND only if such claimant first shall have given written notice, served in the manner provided in the Act, to the PRINCIPAL, within ninety (90) days from the date upon which such claimant performed in the last of the labor or furnished the last of the materials for which payment is claimed, stating, with substantial accuracy, the amount claimed and the name of the person for whom the WORK was performed or to whom the material was furnished; and

(b) No action upon this BOND shall be commenced after the expiration of one (1) year from the day upon which the last of the labor was performed or material was supplied, for the payment of which such action is instituted by the claimant; and

(c) Every action upon this BOND shall be instituted either in the appropriate court of the County where the WORK is to be performed or of such other County as Pennsylvania statutes shall provide, or in the United States District Court for the district in which the PROJECT, to which the CONTRACT relates, is situated, and not elsewhere.

This BOND is executed and delivered under and subject to the Act, to which reference hereby is made.

The PRINCIPAL and the SURETY agree that any alterations, changes and/or additions to the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the WORK to be performed in accordance with the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the CONTRACT, and/or any given by the OBLIGEE of any extensions of time for the performance of the WORK in accordance with the CONTRACT DOCUMENTS, and/or any act of forbearance of either the PRINCIPAL or the OBLIGEE toward the other with respect to the CONTRACT DOCUMENTS, and/or the reduction of any percentage to be retained by the OBLIGEE as permitted by the CONTRACT DOCUMENTS, shall not release, in any manner whatsoever, the PRINCIPAL and the SURETY, or either of them, or their heirs, executors, administrators, successors and assigns, from liability and obligations under this BOND; and the SURETY for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

If the PRINCIPAL is a foreign corporation (incorporated under the laws other than those of the Commonwealth of Pennsylvania) then further terms and conditions of this BOND are and shall be that the PRINCIPAL or the SURETY shall not be discharged from liability on this BOND, nor this BOND surrendered until such PRINCIPAL files with the OBLIGEE a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all bonus taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and Industry, evidencing the payment of all unemployment compensation, contributions, penalties and interest due the Commonwealth from said PRINCIPAL or any foreign corporation,

SUBCONTRACTOR thereunder or for which liability has accrued but the time for payment has not arrived, all in accordance with provisions of the Act of June 10, 1947, P.L 493, of the Commonwealth of Pennsylvania.

In Witness Whereof, the PRINCIPAL and the SURETY cause this BOND to be signed, sealed and delivered this _____ day of _____, 20 ____.

(INDIVIDUAL PRINCIPAL)

_____(Seal)
(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

_____(Seal)
(Name of Partnership)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

(CORPORATION PRINCIPAL)

Attest:

(Secretary)

(Name of Corporation)

4. By: _____
(President/Vice President)

(CORPORATE SEAL)

or (if appropriate)

(Name of Corporation)

5. By: _____
6. Authorized Representative

*Attach appropriate proof, dated as of the same date as the Bond, evidencing authority to execute in behalf of the corporation.

Signed _____

(Title)

Subscribed and sworn to before me on

this ____ day of _____, 20 ____

(Title)

My commission expires:

(CORPORATION SURETY)

(Name of Corporation)

By: _____
** (Attorney-in-fact

Witness:

(Corporate Seal)

**Attach an appropriate power of attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

MAINTENANCE BOND

Know All Men by These Presents, that we, _____
(CONTRACTOR)

hereinafter called the PRINCIPAL, and _____
(SURETY)

hereinafter called the SURETY, a corporation organized and existing under laws of the

_____ of _____, are held and

firmly bound unto _____, hereinafter called the OBLIGEE, as
(OWNER)

hereinafter set forth, in the full and just sum of _____

Dollars (\$ _____), lawful money of the United States of America, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents,

WITNESSETH THAT:

Whereas, The PRINCIPAL heretofore submitted to the OBLIGEE a certain
PROPOSAL, dated _____, 20__ to perform the WORK for the
OBLIGEE, in connection with the construction of _____

_____ as set forth in the CONTRACT DOCUMENTS as prepared by the CITY OF READING.

Now, Therefore, the condition of this BOND shall be such that: If the PRINCIPAL shall remedy, without cost to the OBLIGEE, all defects which may develop during the period of one (1) year from the date of completion by the PRINCIPAL and final acceptance of the OBLIGEE of the WORK performed in accordance with the CONTRACT DOCUMENTS, which defects, in the sole judgment of the OBLIGEE, shall be caused by or shall result from defective or inferior materials or workmanship, and if the PRINCIPAL shall satisfy all claims and demands arising from or related to such defects or growing out of such defects. and if the PRINCIPAL shall indemnify completely and shall save harmless the OBLIGEE from any and all costs and damages which the OBLIGEE may sustain or suffer by reason of the failure so to do; and if the PRINCIPAL shall reimburse completely and shall pay to the OBLIGEE any and all costs and expenses which the OBLIGEE may incur by reason of any such default or failure of the PRINCIPAL, then this BOND shall be void; otherwise, this BOND shall be and shall remain in full force and effect.

The PRINCIPAL and the SURETY agree that any alterations, changes and/or additions to the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the WORK to be performed in accordance with the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the CONTRACT, and/or any giving by the OBLIGEE of any extensions of time for the performance of the WORK in accordance with the CONTRACT DOCUMENTS, and/or any act of forbearance of either the PRINCIPAL or the OBLIGEE toward the other with respect to the CONTRACT DOCUMENTS, and/or the reduction of any percentage to be retained by the OBLIGEE as permitted by the CONTRACT DOCUMENTS, shall not release, in any manner whatsoever, the PRINCIPAL and the SURETY, or either of them, or their heirs, executors, administrators, successors and assigns from liability and obligations under this BOND; and the SURETY for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

In Witness Whereof, the PRINCIPAL and the SURETY cause this BOND to be signed, sealed and delivered this _____ day of _____, 20____.

(INDIVIDUAL PRINCIPAL)

_____(Seal)
(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

_____(Seal)
(Name of Partnership)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

Witness:

By: _____(Seal)
(Partner)

(CORPORATION PRINCIPAL)

Attest:

(Secretary)

(Name of Corporation)

7. By: _____
(President/Vice President)

(CORPORATE SEAL)

or (if appropriate)

(Name of Corporation)

8. By: _____
9. Authorized Representative

*Attach appropriate proof, dated as of the same date as the Bond, evidencing authority to execute in behalf of the corporation.

Signed _____

(Title)

Subscribed and sworn to before me on

this ____ day of _____, 20 ____

(Title)

My commission expires:

(CORPORATION SURETY)

(Name of Corporation)

By: _____
 ** (Attorney-in-fact)

Witness:

(Corporate Seal)

**Attach an appropriate power of attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

STATEMENT ACCEPTING PROVISIONS OF WORKERS' COMPENSATION ACT

STATE OF _____

ss.

COUNTY OF _____

The undersigned contractor has accepted the provisions of the Workers' Compensation Act of Pennsylvania, with all supplements, and has insured liability thereunder in accordance with the terms thereof with the insurance company whose signature is attached hereto.

For Individual

_____(SEAL)

For Corporation

(Name of Corporation)

By:_____
(Official Title)

Attest:_____
(Secretary or Asst. Secretary)

For Partnership

(Name of Partnership)

By:_____(SEAL)

_____(SEAL)
(Partners)

(Name of Insurance Company)

By:_____
Attorney-in-Fact

STIPULATION AGAINST LIENS

WHEREAS, _____, hereinafter called the CONTRACTOR,
has entered into a CONTRACT, dated _____, 20____, with
_____ hereinafter called the CITY, to
provide materials and perform labor necessary for the manufacture and furnishing of the: as set forth in
the CONTRACT DOCUMENTS as prepared by the City of Reading.

NOW, THEREFORE, it is hereby stipulated and agreed by and between the said parties, as part of
the said CONTRACT, and for the consideration therein set forth, that neither the undersigned
CONTRACTOR, any SUBCONTRACTOR or material man, nor any other person furnishing labor or
materials to the said CONTRACTOR under this CONTRACT shall file a lien, commonly called a
mechanic's lien, for WORK done or materials furnished for the above manufacture.

This stipulation is made and shall be filed with the Berks County Prothonotary within ten (10) days
after execution, in accordance with the requirements of Section 1402 of the Mechanics Lien Law of 1963
of the Commonwealth of Pennsylvania in such case provided.

IN WITNESS WHEREOF, the parties hereto have caused the signature of their proper officers to
be affixed thereto on this _____ day of _____, 20____.

(SEAL)

(CITY OF READING)

BY: _____

TITLE: _____

ATTEST:

BY: _____

TITLE: _____

(SEAL)

(CONTRACTOR)

BY: _____

TITLE: _____

ATTEST:

BY: _____

TITLE: _____

10. INDEMNITY AGREEMENT & HOLD HARMLESS

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned has entered into a contract with the CITY OF READING, dated _____, 20 __, providing for the

City of Reading, Pennsylvania.

NOW, THEREFORE, in consideration of the award of said contract to the undersigned, _____, as well as in further consideration of the sum of ONE DOLLAR (\$1.00) in hand paid to the said _____ by the City of Reading, receipt whereof is hereby acknowledged, the said _____ agrees to indemnify and save harmless the CITY OF READING, its officers, agents, servants, and employees against any and all loss, damage, costs and expenses which the said CITY may hereafter suffer, incur, be put to or pay by reason of any bodily injury (including death) or damage to property arising out of any act or omission in performance of the work undertaken under the aforesaid contract.

EXECUTED this ____ day of _____, 20__.

By: _____

Title: _____

ATTEST:

(Title)

NOTICE TO PROCEED

TO:

Project_____

Contract No._____

Amount of Contract_____

You are hereby notified to commence work on the referenced contract on or before _____, 20____, and shall fully complete all of the work of said contract within_____ consecutive calendar days thereafter. Your completion date is therefore _____, 20_____.

The contract provides for an assessment of the sum of \$_____ as liquidated damages for each consecutive calendar day after the above established contract completion date that the work remains incomplete.

Dated this _____ day of _____, 20_____.

By_____

Title_____

ACCEPTANCE OF NOTICE

Receipt of foregoing Notice to Proceed is hereby acknowledged

By _____

this _____ day of _____, 20_____.

By _____

Title _____

WAGE RATES

GENERAL PROVISIONS

GENERAL PROVISIONS

G.1 SUB-HEADINGS. The paragraph headings are inserted in these provisions and the following specifications for convenience only and shall not be considered as interpreting or limiting the application of paragraphs.

G.2 DEFINITIONS. The following terms and expressions used in this contract and specifications shall be understood as follows:

The expression "The City" shall mean the City of Reading, Pennsylvania, the party of the first part to this contract.

The word "Engineer" shall mean the Engineer, Architect, or other official in direct charge of the work for the City or his authorized representative as designated by the applicable Director.

The word "Inspector" shall mean an inspector of the City assigned to the inspection of materials, structures and workmanship under this contract.

The word "Contractor" shall mean the party of the second part to this contract, whether a corporation, partnership, or individual.

The word "Specifications" shall mean the specifications describing the work, the drawings, and the general provisions.

The word "Drawings/Plans" shall mean the general drawings, plans, maps, diagrams or illustrations accompanying these specifications, and such supplementary drawings as may be furnished from time to time.

The term "Materials" as used herein includes, in addition, to materials incorporated in the project used or to be used in the operation thereof, equipment and other materials used and/or consumed in the performance of the work.

Wherever in the specifications the words "to be," "to be done," "if," "as," "directed," "required," "permitted," "ordered," "instructed," "designated," "considered necessary," or words of like import are used, it shall be understood that the direction, requirement, permission, order, instruction, designation or decision of the Engineer is intended, and similarly the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, acceptable or satisfactory to, the applicable Director or the Engineer, unless the context show that another meaning is plainly intended.

G.3 SPECIFICATIONS AND DRAWINGS. The specifications and drawings are intended to cover all of the work that is known to be required to effect a complete installation. They are intended to be mutually explanatory of each other, but should any discrepancy or inconsistency appear or any misunderstanding arise as to the import of anything contained in either the specifications or the drawings, the interpretation of the doubtful portions will be made by the Engineer, whose decision shall, in all cases, be final and binding on the Contractor.

Any materials or workmanship obviously necessary to satisfactory completion shall be furnished and installed whether or not specifically shown or mentioned. Any corrections of errors or omissions in the specifications or drawings, or both, may be made by the Engineer when such correction is necessary for the proper fulfillment of their intention as determined by him/her. Figures shall have preference over scale in reading dimensions. Copies of the specifications and drawings shall be kept constantly at the work. Any supplementary or detail drawings which may be made by the Engineer subsequent to the date of this contract, relating to the work herein contemplated, as showing more particularly the details of the work to be done, or specifications and the drawings furnished by the Contractor and approved by the Engineer, are, and are to be held to be, controlling parts of this contract insofar as they do not conflict with other provisions of the contract.

If the Contractor, in the course of the work, finds any discrepancy between the plans and the physical conditions of the locality, or any errors or omissions in the plans or in the layout as given by the points and instructions furnished by the Engineer, it shall be his duty to inform the Engineer, in writing, and the Engineer shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

G.4 ENGINEER TO DECIDE. All work under this contract shall be done in a manner acceptable to the Engineer, who shall determine the amount, quality, acceptability and fitness of the several kinds of work and material which are to be paid for hereunder, and shall decide all questions which may arise as to measurements of quantities and the fulfillment of the conditions of this contract on the part of the Contractor.

G.5 WORK TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS AND DRAWINGS. The work at all stages of its completion must conform with the specifications and drawings and with the lines and grades and other instructions of the Engineer, as given from time to time during the progress of the work. In no case will any work in excess of the requirements of the drawings as interpreted by the Engineer be paid for unless authorized in writing by the Engineer.

G.6 RIGHT TO MAKE CHANGES IS RESERVED. The City reserves the right to make alterations in the location, lines, grade, plan, form dimensions, numbers or materials of the work herein contemplated, either before or after the commencement of construction. If such alterations diminish the amount of work to be done, they shall not form the basis for a claim for damage or for loss of anticipated profits from the work which may be dispensed with; if they increase the amount of work, such increase shall be paid for according to the quantity of work actually done and at prices stipulated for such work under this contract. All work actually done under a unit price (where applicable) contract, whether more or less than the quantity estimated or specified, shall be paid for by the determined units, on the basis of the bid per unit in the proposal.

G.7 EXTENSION OF TIME. If the Contractor is delayed at any time in the progress of the work by any act or neglect of the City, or by City employees, or by any other contractor employed by the City, or by changes ordered in the work, or by strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties or any causes beyond the Contractor's control, or by any cause which the Engineer shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the Engineer may decide subject to the approval of the applicable Director.

No such extension shall be made for delay due to rejection of defective materials or workmanship or for any delay occurring more than seven (7) days before claim therefore is made in writing to the Engineer. In the case of a continuing cause of delay, only one claim is necessary.

If no schedule or agreement stating dates upon which drawings shall be furnished is made, then no claim for delay shall be allowed because of any delay in the furnishing of drawings to the Contractor.

G.8 ADEQUATE PLANT AND METHODS. The Contractor shall furnish such construction plant and use such methods and appliances as will secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time specified. Before starting the installation of the construction plant, the Contractor shall submit to the Engineer, for approval, a plan showing the general arrangement of the plant to be installed and the proposed facilities for storage of materials and equipment. If at any time the plant or any portion of it shall appear to the Engineer to be, or likely to become, inadequate, incomplete, faulty or unsafe, the Contractor shall promptly obey the orders of the Engineer to supplement or to remove or replace the same; but the failure of the Engineer to issue such orders shall not relieve the Contractor of his responsibility for the efficiency, adequacy and safe operation of the plant.

He shall cover and protect his work from damage, and all injury to the same, before completion of the contract.

He shall be financially responsible for all damage to the party of the first part or its property, to other contractors, to the neighboring premises, or to any private or personal property, for any cause whatsoever, during the period of the contract.

G.9 WORKERS. The Contractor shall employ only competent and skillful employees to do the work, and whenever the Engineer shall notify the Contractor, in writing, that any person on the work is, in his/her opinion, incompetent, unfaithful or disorderly, uses threatening or abusive language to any official having supervision of the work, or is in any other way unsatisfactory, such person shall be discharged from the work and shall not again be employed on it except with the consent of the Engineer.

Neither party shall employ or hire any employee of the other party without the latter's consent.

G.10 WAGES. All employees directly employed on this work shall be paid wages which shall in no event be less than the minimum hourly wage rates for skilled, semi-skilled, and unskilled labor prescribed by the Commonwealth of PA Prevailing Wage Act, P.L. 987 as may be amended, if applicable.

G.11 PENALTY FOR FAILURE TO LIVE UP TO MINIMUM WAGE CONTRACT. A penalty shall be exacted from the Contractor in an amount equal to twice the difference between the minimum wage contained in the prescribed wage rates, and the wage actually paid to each laborer or mechanic for each day during which he has been employed at a wage less than that prescribed.

G.12 INSPECTORS TO REPORT VIOLATIONS. Every person assigned as an Inspector of the work to be performed under this contract, in order to aid in enforcing the fulfillment of the minimum wage requirements thereof, shall, upon observation or investigation, report to the applicable Director, all violations of minimum wage stipulations, together with the name of each laborer or mechanic who has been paid a wage less than that prescribed, and the day or days of such violation.

G.13 PENALTIES TO BE WITHHELD FROM MONEYS DUE THE CONTRACTOR.

All minimum wage violation penalties shall be withheld and deducted for the use of the City from any moneys due the Contractor by the City; provided, that if the Contractor subsequently pays to all laborers and mechanics the balance of the amounts stipulated as minimum wages, the City shall pay to the Contractor the amounts so withheld.

G.14 CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES. The Contractor hereby assumes all responsibility for himself/herself, his/her agents and employees growing out of connection with the execution of the work called for by this contract, for the violation of, City ordinances and the laws governing contract work in the Commonwealth of Pennsylvania. The Contractor further agrees to hold the City of Reading harmless from all responsibility for employees on this work under the Workmen's Compensation Act of the Commonwealth of Pennsylvania, and to carry insurance on his/her employees, as provided thereby.

G.15 CONTRACTOR REPRESENTED ON THE WORK. The Contractor shall give personal attention constantly to the faithful prosecution of the work and shall be present, either in person or by a competent superintendent, on the site of the work, continuously during its progress. Such representative shall have authority to receive and to act without delay upon all instructions of the Engineer or assistants in the prosecution of the work in conformity with the contract.

Insofar as it is practicable, all orders given by the Engineer to the Contractor shall be in writing. In those cases where orders are given orally they shall be confirmed in writing. Orders or directions, written or oral, from the Engineer, delivered to the Contractor's office shall be considered as delivered to the Contractor.

G.16 REPRESENTATIVE MUST BE PRESENT. In case the Engineer or a representative may at any time have occasion to give directions regarding the work for the reason that the same is not, in the Engineer's opinion, being carried out in accordance with the provisions of this contract, and should there be no responsible representative of the Contractor on the ground empowered to receive such instructions, the Engineer or a representative shall order that particular portion of the work to be stopped until such representative of the Contractor appears and receives instructions. It is hereby agreed that suspensions of the work for such cause shall not entitle the Contractor to claims for damage of any kind, nor to an extension of the time in which to complete the work to be done under this contract.

G.17 LEGAL ADDRESS OF CONTRACTOR. The address given in the bid or proposal upon which this contract is based is hereby designated as the legal address where all notices, letters and other communications to the Contractor shall be mailed or delivered prior to the beginning of the work provided for in this contract.

The delivery at the above-named place, or depositing in a post-paid wrapper directed to the above place, in any post office box regularly maintained by the post office, of any notice, letter or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor and the date of said service shall be the date of such delivery or mailing.

G.18 CHANGE IN ADDRESS. Such address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the City. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

G.19 LAWS, ORDINANCES AND REGULATIONS. The Contractor shall be fully informed as to all laws, ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction over the same, if any discrepancy or inconsistency shall be discovered in this contract, specifications or drawings, in relation to any such law, ordinance, population, order or decree, the contractor shall immediately report the same in writing to the Engineer. At all times the Contractor shall observe and comply with all laws, ordinances, regulations, orders and decrees which may be in effect during the progress of this contract; and shall indemnify and save harmless the City and its officers and employees against any claim or liability arising from the violation of any legal requirement in the prosecution of this contract.

G.20 INDEMNIFICATION OF CITY. In case any action at law, proceeding in eminent domain, or suit in equity may or shall be brought against the party of the first part, or any of its offices or agents, for or on account of the failure, omission or neglect of the Contractor or the subcontractors, his/her or their employees or agents, to do and perform any of the covenants acts, matters, or things by this contract undertaken to be done or performed by the Contractor or subcontractors, his/her or their employees or agents, or for any injury or damage caused by the negligence of the Contractor or subcontractors, his/her or their employees or agents, or for damage or injury for which the Contractor undertakes responsibility under the provisions of this contract, the Contractor shall immediately assume and take charge of the defense to such actions, proceedings or suits in like manner and to all intents and purposes, as if said actions, proceedings or suits had been brought directly against the Contractor; and the Contractor shall also indemnify and save harmless the party of the first part, its officers and agents, of and from all loss, cost or damage whatever arising out of such actions, proceedings or suits as may or shall be brought as aforesaid.

G.21 SUITS AND CLAIMS. The Contractor agrees to indemnify and save harmless the City of Reading, the applicable Director, the Engineer, and their assistants, from all suits or actions of every name and description, either in law or in equity, including proceedings in eminent domain for the recovery of consequential damages, or for or on account of use of patented appliance, brought against them or either of them, or for any damage or injuries received or sustained by any party or parties, person or persons, natural or artificial, either in the performance or as a result of the work under this agreement, regardless of whether such suits, actions or proceedings brought are based or grounded upon negligence of the Contractor, the subcontractors, or his/her or their agents, servants or employees.

The Contractor further agrees that all or as much of the monies due under this agreement as shall be or may be considered necessary by the applicable Director, shall or may be retained, without any liability of the City to the Contractor, for interest thereon because of the retention thereof, until all such suits, proceedings or claims have been settled or terminated, and satisfactory evidence to that effect furnished to the applicable Director, provided however, that no such monies shall be retained by the City after six (6) years following the completion and acceptance of the work under the contract, excepting for or on account of claims filed or suits or proceedings begun before the expiration of the applicable statute of limitations.

G.22 RESPONSIBILITY FOR INJURY. The Contractor shall assume all responsibility for loss, damage or injury to persons or property arising out of the nature of the work, from the actions of the elements, or from any unforeseen or unusual difficulties over which the City has no control, in addition to and without limiting the Contractor's liability under the other provisions of the contract.

G.23 CONTRACTOR'S CLAIMS FOR DAMAGE. If the Contractor claims compensation for any damage alleged to have been sustained by reason of any act or omission on the part of the City or any of its agents, he shall, within one (1) week after the sustaining of such damage, make a written statement to the Engineer of the nature of the damage sustained, and shall, on or before the fifteenth (15th) day of the month succeeding that in which any such damage shall have been sustained, file with the Engineer an itemized statement of the details and amounts of such damage, and unless such statement shall be made as so required, the claim for compensation shall be forfeited and invalid, and the Contractor shall not be entitled to payment on account of any such damage.

G.24 LINES AND GRADES. All lines and grades will be given by the Engineer, but the Contractor shall provide such material and give such assistance therefore as may be required by the Engineer, and the marks so given shall be carefully preserved. The Contractor shall keep the Engineer informed, a reasonable time in advance, of the time and places at which he/she intends to work, in order that lines and grades may be furnished and necessary measurements for record and payment made with the minimum inconvenience to the Engineer or delay to the Contractor. No claim for extra payment will be allowed for the cost to the Contractor of any material, work or delay occasioned by giving lines and grades, or making necessary measurements or inspections, as all such cost shall be considered to have been included in the price bid for the work.

G.25 INSPECTION. The Engineer will appoint such person or persons as may be deemed necessary to inspect properly the materials furnished and the work done under this contract, and to see that the same correspond strictly with these specifications. Such materials and workmanship shall always be subject to the approval of the Engineer, but no inspection, approval or acceptance of any part of the work herein contracted for or of the materials used therein, nor any payment on account thereof, shall prevent the rejection of said work or materials at any time thereafter during the existence of this contract, should said work or materials be found to be defective, or not in accordance with the requirements of the contract.

The Contractor shall permit, or secure permission for the Engineer or a duly authorized Inspector or representative to enter any manufactory, shop or other place where any material for, or part of the work is being prepared, manufactured or constructed, at any time when such work is in progress. The Contractor shall furnish and prepare, or cause to be furnished or prepared, without charge, all such assistance, appliances, samples of materials and test specimens as may be ordered by the Engineer or such Inspector or representative for the purpose of making official tests and investigations.

The Engineer shall be notified of the time and place of preparation, manufacture or construction of any material for, or part of the work which he/she may wish to inspect before delivery at the site of the work. Such notification shall be give a sufficient time in advance of the beginning of the work on such material or part to allow arrangements to be made for inspection and testing.

G.26 NIGHT WORK. No night work, except for the inspection of lighting, requiring the presence of the Engineer or Inspector will be permitted except in case of emergency, and then only with the written consent of the Engineer and to such an extent as may be judged necessary.

G.27 SUNDAY WORK. No Sunday work will be permitted, except in case of great emergency, and then only with the written consent of the Engineer, and to such extent as is absolutely necessary.

G.28 NO WORK IN BAD WEATHER. No work shall be done under this contract when, in the opinion of the Engineer, the weather is unsuitable for good and careful work to be performed. No concrete work shall be done on days on which the temperature falls below 25 degrees Fahrenheit. Should the severity of the weather continue such that the work cannot be prosecuted successfully, the Contractor, upon order of the Engineer, shall cease all such work until directed to resume the same. In the latter case, suitable extension of time shall be allowed to compensate for time actually lost as provided for in Article G.7.

G.29. NOT TO SUBLET OR ASSIGN. The Contractor shall give personal attention constantly to the faithful prosecution of the work and shall not assign, transfer, convey, sublet or otherwise dispose of this contract, or his/her title, right or interest in or to the same or any part thereof, nor shall the Contractor assign, by power of attorney or otherwise, any of the monies due or to become due, nor issue any order or orders or drafts on the Controller or Treasurer of the City of Reading for any monies due or to become due under this contract, unless by and with the consent of the City first duly had and obtained by resolution entered upon the minutes of said City.

G.30 RIGHT OF PROPERTY IN MATERIALS. Nothing in this contract shall be considered as vesting in the Contractor any right of property in materials used, after they shall have been attached to or incorporated in the work, nor in materials which have been estimated for partial payment, but all such materials, upon being so attached, incorporated or estimated, shall become the property of the City.

G.31 DEFECTIVE MATERIALS AND WORKMANSHIP. No materials of any kind shall be used until they have been examined and approved by the Engineer, who shall have full power to condemn any work and materials not in accordance with the specifications, and to require the Contractor to remove any work or materials so condemned.

Inspections of the work shall not relieve the Contractor from any of his/her obligations to fulfill the contract as herein described, and defective work shall be made good, and unsuitable materials may be rejected, notwithstanding that such work or materials may have been previously overlooked by the Engineer and accepted or estimated for payment if the work or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall immediately make good such defect in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work shall be condemned by the Engineer as unsuitable or not in conformity with the drawings or specifications, the Contractor shall forthwith remove such materials from the vicinity of the work. If the Contractor shall fail to remove or replace any defective or damaged materials or work after reasonable notice, the Engineer may cause such material or work to be removed or replaced, and the expense thereof shall be borne by the Contractor.

G.32 RESPONSIBILITY FOR WORK. The Contractor shall be held responsible for any or all materials or work to the full amount of all payments made thereon, and shall be required to make good, at his/her own cost, any injury or damage which said materials or work may have sustained from any source or cause whatever before its final acceptance.

G.33 CONDITIONS UNDER WHICH CITY MAY COMPLETE WORK. If the work to be done under this contract shall be neglected or abandoned, or the contract or any claim thereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time the Engineer shall be of the opinion, and shall so certify in writing to the City's representative, that the rate of progress is insufficient or that the work, or any part thereof, is unnecessarily or unreasonably delayed, or that the Contractor is violating any of the provisions of this contract or carelessly executing any portion of the work, the City may notify the Contractor and surety in writing to fulfill the conditions of the Contract; and should the Contractor or the surety fail to comply with said notice within ten (10) days, the City may notify the Contractor and the surety to discontinue all work, or any part thereof; and thereupon the Contractor and the surety shall discontinue said work, or said part thereof as the City may designate; and the City may thereupon, by contract or otherwise, as it may determine, complete the work or such part thereof, and charge the expenses thereof to the Contractor or the surety; and may take possession of and use therein such materials, animals, machinery, equipment, implements and tools of every description as may be found upon the work. The expense so incurred shall be deducted and paid by the City out of any monies then due or to become due the Contractor under this contract; or any part thereof; and in case such expense is less than the sum which would have been payable under this contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such expense shall exceed the latter sum, the Contractor or the surety shall pay the amount of such excess to the party of the first part.

G.34 ALL PARTS OF WORK COVERED. The Contractor further agrees that the following clauses relative to the construction of the work shall apply to each and all of the separate parts of the work, as though specially mentioned under the different headings in the specifications:

Delivery of Materials - The Contractor shall be entirely responsible for delivery of all materials to the site of the work, making the arrangements therefore.

Engineer Shall Measure - No work shall be covered over or filled in until it shall have been inspected by the Engineer.

Materials Properly Stored - The materials to be used in construction shall be protected from deterioration and damage, and shall be so disposed of as not to endanger the work and in such manner that full access may be had at all times to all work under construction or completed.

Surplus Materials Removed - All parts of the work shall be kept in as neat and orderly condition as circumstances will permit and upon completion of the work, all surplus materials, earth, sand, rubbish and refuse of every kind, and all tools, machinery, equipment and other materials belonging to the Contractor shall be removed from the construction works and adjoining premises so as to leave everything in an acceptable condition, within a week after receipt of final certificate.

G.35 ESTIMATED QUANTITIES APPROXIMATE. In unit price contracts, the quantities of the various classes of work to be done and materials to be furnished under this contract, as estimated by the Engineer and listed in Specifications, attached hereto, are approximate and only for the purpose of comparing, on a uniform basis, the bids offered for the work under this contract; and neither the City nor the Council nor any member of the Council of the City of Reading is to be held responsible if any of the said estimated quantities shall be found to be not even approximately correct in the construction of the work; and the Contractor shall make no claim for damages on anticipated profits or loss of profit, because of a difference between the quantities of the various items of work actually done or materials actually furnished and the estimated quantities stated in the Specifications, or because of the entire omission of any of the quantities or items stated in the Specifications.

G.36 EXTRA WORK. The Contractor shall do any work not herein otherwise provided for which, in the opinion of the Engineer, is necessary for the proper completion of the work, but not such work will be allowed or paid for except on a written order of the Engineer, and there shall be no claim for extra work or materials or for damage sustained except under this Article. The extra work order issued by the Engineer shall specify the basis of payment for the extra work. Any extra work or changes in the work involving changes in the plans and/or specifications shall be approved by the applicable Director, prior to the execution of the work.

G.37 MONTHLY ESTIMATES. Current payments for work done under this contract will be made as follows: on invoices submitted by the Contractor and approved by the Engineer or Architect. Ten percent (10%) of each General Contractor invoice request shall be retained by the City on this contract until it is completed up to City codes and contract specifications and approved by a City Official or person representing a City Official Architect or Engineer.

It is further agreed and understood that inclusion of any portion of the work in the monthly estimate shall not be construed as final approval or acceptance of the same.

G.38 CONTRACTOR SHALL PREPARE FOR FINAL INSPECTION. Upon the completion of the work the Contractor shall tear down and remove all temporary buildings and structures built by the Contractor, remove and thoroughly clear away all debris, forms and surplus materials and leave the site of the work in a neat and satisfactory condition, and shall notify the Engineer when the work is ready for final inspection.

G.39 WORK TO BE PROPERLY PERFORMED. It is expressly understood that acceptance of work and materials during construction will not imply final acceptance of the work, if the final inspection shall disclose faulty workmanship or materials; and all work of whatever kind that, during its progress and before it is finally accepted, may become damaged from any cause, shall be repaired in a manner satisfactory to the Engineer or, if necessary, shall be broken up and removed and replaced with good and satisfactory work by the Contractor at his own expense. All work of every description shall be the best of its respective kind; and everything not particularly specified herein shall be done and finished in the best manner, and as is usual in first-class work of the several kinds.

Failure or neglect on the part of the Engineer, or any authorized agents to condemn or reject any bad or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if such bad or inferior materials or work becomes evident at any time prior to the final acceptance of the work and the release of the Contractor by the Council of the City of Reading; nor shall it be construed as barring the City of Reading at any subsequent time from the recovery for damages of such sum of money as may be needed to build a new all portions of the work in which fraud was practiced or improper materials hidden, whenever found.

G.40 ACCEPTANCE AND FINAL PAYMENT. Upon receipt of written notice that the work is ready for final inspection and acceptance, the Engineer or Architect shall promptly make such inspection, and when he/she finds the work acceptable under the contract fully performed he/she shall promptly issue a final certificate, over his/her own signature, stating that the work provided for in this contract has been completed and is accepted under the terms and conditions thereof, and the entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor within (30) days after the execution of said final certificate.

G.41 WAIVER. Neither acceptance by the City, or any of its officers or employees, nor any order, measurement or certificate by the Engineer, nor any order by the City Council for payment of money, nor any payment for, nor any extension of time, nor any possession taken by the City or its officers or employees, shall operate as a waiver of any portion of this contract or of any power herein reserved to the City, or of any right to damage herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach. All remedies provided in this contract shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided.

G.42 ACCEPTANCE OF FINAL CERTIFICATE. The acceptance by the Contractor of payment of the final estimate shall be conclusive evidence of acceptance and approval of estimates, accounting and deductions, and of full payment by the City for all work, labor, materials and services done or furnished hereunder, and of full satisfaction, discharge, release and waiver of all claims and demand of; or on behalf of the Contractor against the City, arising out of this agreement and the execution thereof. It is hereby further agreed that the Contractor shall not be entitled to demand or receive payment except in the manner set forth in this contract; and the Contractor further agrees that the final payment of the amount due under this contract and payment of the bills rendered for work done and materials furnished in accordance with any alterations of the same, shall release the City of Reading from any and all claims and liabilities on account of the work performed and materials furnished under said contract, or any alteration thereof.

G.43 MAINTENANCE AFTER COMPLETION. The Performance Bond shall remain in force for one (1) year from the date of completion and acceptance of the work under this contract, as security against any and all damage which may result from defects of materials or workmanship which may become apparent prior to the expiration of the one-year maintenance period. During this period the Contractor shall, promptly upon notification from the Engineer, repair all breaks and failures due to defects of material or workmanship at his own expense. If the Engineer shall deem it necessary and shall so direct, such repairs shall be made within twenty-four (24) hours after service of notice. If the Contractor unnecessarily delays making repairs ordered, or if delay would cause serious loss or damage, the City may undertake to have such repairs made or defects repaired without previous notice, and the expense of such repairs shall be borne by the Contractor or the surety. The Contractor shall be responsible for any damage resulting to any person or property from any violation of the guarantee and from unnecessary delays in making repairs.

G.44 PRICES. The City agrees to pay, and the Contractor agrees to receive, the price specified in the proposal submitted, as full compensation for furnishing all the materials called for, and for all labor and use of all machinery, equipment and tools necessary for executing the work contemplated in this contract; for all royalties, for patents and patented materials, appliances and processes; also for all loss or damage arising out of the nature of the work, or from the action of the elements, or from any unforeseen reasons, obstructions or difficulties which may be encountered in the prosecution of the work, for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of said work as herein specified, and for well and faithfully completing the work, and the whole thereof, according to the specifications and drawings and the requirements of the Engineer under them.

G.45 NO EXTRA COMPENSATION. The Contractor further agrees not to ask, demand, sue for, or recover for any extra compensation, for any materials furnished or work done under this contract, beyond the amounts payable for the several classes of work or kinds of materials herein enumerated, which shall be actually performed and furnished at the prices therefore herein agreed upon and fixed.

G.46 CONTRACTOR TO TAKE OUT ALL PERMITS. The Contractor shall take out all necessary permits required by agencies of the City of Reading and/or all other governmental agencies; shall give all notices required by law or ordinances; shall pay all fees and charges incident to the due and lawful prosecution of the work covered by the contract, and shall comply with all laws and regulations relating to buildings and public highways. All permits shall be at his expense.

G.47 NO CLAIM FOR EXTRA WORK. No claim for extra work or material shall be allowed to the Contractor, unless before the performance of all such extra work the applicable Director shall have first authorized the same in writing, and the price or prices to be paid therefore shall first have been agreed upon in writing between the Director and the Contractor, and the same shall have been done or furnished under a written order from the Director given before the performance of such extra work or the furnishing of such extra materials. All claims for extra work or materials in any month shall be made to the Director in writing before the fifteenth (15th) day of the following month, and failing to make such claim within the time required, the right of the Contractor to extra pay for such extra work or materials shall be deemed to have been waived and forfeited.

G.48 WORK TO BE DONE TO THE SATISFACTION OF THE CITY ENGINEER. All the work under this contract shall be done to the satisfaction of the City Engineer, who shall in all cases determine the amount, quality, acceptability and fitness of the several amounts of work and materials which are to be paid for hereunder and shall decide all questions which may arise as to the measurement of quantities in the fulfillment of this contract on the part of the Contractor, and shall determine all questions respecting the true construction or meaning of the plans and specifications, and the determination and decision thereon shall be final and conclusive; and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

G.49 ENGINEER TO INSPECT AND REJECT. The Engineer shall inspect the materials furnished and the work done, and see that the same strictly correspond to the specifications, and he shall at all times have free access to the works, storehouse and yard of the Contractor, and shall be privileged to take such samples therefrom as he may deem necessary; and if the work, or any material brought on the grounds for the use of the work, or selected for the same, shall be condemned by the Engineer, as unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove such materials from the work.

Before issuance of the final certificate the Contractor shall furnish evidence satisfactory to the Engineer that all payrolls, materials, bills and other indebtedness connected with the work have been paid.

It is understood and agreed by the parties hereto that the final estimate of the Engineer shall be evidence of the amount of work performed by the Contractor under and by virtue of this agreement, and shall be taken as the full measure of the compensation to be received by the Contractor. The aforesaid estimate shall be based upon the contract price for the furnishing of all the different materials and labor, and the performance of all the work mentioned in this contract, including the specifications, and where there may be any ambiguity therein, the Engineer's instructions shall be considered explanatory and the decision shall be final.

No inspection, approval or acceptance of any of the work herein contracted for, or of the materials used herein, or any payment on account thereof shall prevent the party of the first part from objecting to the acceptance of said work or materials at any time during the existence of this contract. Neither the inspection of the applicable Director, or Division Head, or the City Engineer or any of their employees nor any order, measurement or certificate by the City Engineer nor any order by the Director for the payment of money, nor any payment for, or acceptance of, the whole or any part of the work, by the Director of the Division of Planning, nor any extension of time, nor any possession taken by the Director or his employees, shall operate as a waiver of any provision of this contract, or any power herein reserved to the party of the first part, or of any right to damage herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other subsequent breach.

Any remedy provided in this contract shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided; and in addition to all other suits, actions or legal proceedings the party of the first part shall be entitled to as of right.

G.50 CONTRACTOR NOT TO DISCOMMODE PRIVATE COMPANIES. The Contractor shall afford while the work is underway, the necessary facilities to any and all companies owning railway tracks, pipes, subway ducts, or other surface, sub-surface or super-surface construction on the line of the work, in the preservation of the same from injury, all without charge therefore the expense to the City.

G.51 EXAMINATIONS. At any time before or after completion of the work, should the City Engineer require it, the Contractor shall make such openings, and to such extent, through such part or parts of the work, as the City Engineer may direct, and shall restore the work so distributed to the satisfaction of the City Engineer; and should the work, in the opinion of the City Engineer, whose decision shall be final and conclusive therein, be found faulty in any respect, the whole of the expense incurred thereby shall be defrayed by the Contractor, according to and upon the prices herein set forth, but if otherwise, by the City.

TECHNICAL SPECIFICATIONS

Description of Work to be Performed:

The traffic signal improvement project will encompass a total of five (5) intersections that require various traffic signal items to be installed, replaced, and/or upgraded. The work to be performed under this Contract consists of furnishing all materials, equipment, labor, and supervision required. Generally comprised of installation of new NEMA TS-2 Controllers, various length mast arms, streetlight pole, LED vehicular signal heads, LED pedestrian countdown signals, trenching, conduit, junction boxes, electrical service, communication power cabling, structure mounted signs, and all incidental work related thereto.

Performance Time:

The Bidder agrees that the work will be substantially completed within 270 days from the date of the Notice to Proceed.

ITEM 0954-0202 – SIGNAL CABLE 14 AWG, 5 CONDUCTORS

CONSTRUCTION Section 954.3(e) and as follows:

Provide temporary signal wiring where necessary to retain continuous signal operation, incidental to installing the signal cable.

MEASUREMENT AND PAYMENT Section 954.4(d) and as follows:

Includes any necessary temporary signal cabling/wiring to retain continuous signal operation.

ITEM 0954-0302 – JUNCTION BOX, JB-27

Section 954.3(h) Junction Box. Revise to read: Section 910.3(p) and as follows:
Provide a logo on cover to read “TRAFFIC SIGNALS”.

Excavate existing signal support foundation to a deep to accommodate the junction box and conduits.

Provide temporary signal cabling to accommodate this work if necessary. Section 954.4(e)
Junction Box. Revise to read:
Each. For the type indicated. Includes all work to accommodate the junction box at the existing support foundation location.

ITEM 0955-3202 – VEHICULAR SIGNAL HEAD, THREE 12” SECTIONS, LED LENSES

Section 955.3(a) General. Add to read:

Remove of the temporary traffic signal appurtenances on the NE and NW corners. Section 954.4(a) Vehicular Signal Heads. Revise to read:

Includes the removal of the traffic signal appurtenances on the NE and NW corners.

ITEM No. 4951-0135 TRAFFIC SIGNAL SUPPORT, 35' MAST ARM, POWDER COATED

DESCRIPTION – This work is the furnishing and installation of powder coated galvanized traffic signal supports in Hunter Green color, FHWA Color no. 24066.

MATERIAL – Section 951.2, 1104.01, 1104.02, and as follows:

Provide supports with powder coating using Urethane or Triglycidyl Isocyanurate (TFIC) Polyester Powder finish for the traffic signal support. Provide a sample and corresponding Federal Color Number, that conforms to the color specified, to Municipality for approval at least 60 days before ordering the traffic signal support pole. Clamps, brackets, banding, strapping and/or connections placed on powder coated supports shall match the color of the support.

Powder coated support is to be galvanized with surfaces mechanically etched by brush blasting followed by preheating of the zinc coated substrate to a temperature of 450F for a minimum of one hour in a gas fired convection oven. Apply powder coating electrostatically and cure in a gas-fired convection oven by heating the zinc coated substrate to a minimum of 350F and a maximum temperature of 400F. Provide thermosetting powder resin that provides both intercoat as well as substrate fusion adhesion that meets 5A or 5B according to ASTM D3359.

Supports are to be wrapped in 3/16 inch thick ultra-violet inhibited plastic-backed foam and cradled in a 1.0-inch thick rubberized foam base for transportation. Provide painted matching hardware for the powder coated support.

CONSTRUCTION – Section 951.3, 1104.01, and 1104.02.

Install powder coated traffic signal support with nylon slings to preserve the integrity of the coating. Pad and handle all components during loading, unloading, and installation. If the coating becomes chipped, scratched, blistered, or otherwise damaged, it must be repaired to the coating manufacturer's recommendations at no additional cost to the municipality.

MEASUREMENT AND PAYMENT – Each

I. ITEM 4952-1041 NEMA TS-2, TYPE 2 CONTROLLER ASSEMBLY, TYPE 2 MOUNTING, CAMERA SURVEILLANCE CONNECTION

MATERIAL – In accordance with Sections 952.2 and as follows:

Provide a controller unit that matches the existing controller unit, Eagle EPAC 300.

Provide a controller assembly to accommodate an electric power source for the camera surveillance connection.

CONSTRUCTION – In accordance with Section 952.3 and as follows:

Connect the power supply cable to the camera surveillance control with coordination with the cities' camera contractor under Item 9000-0001.

ITEM 4952-1041 NEMA TS-2, TYPE 2 CONTROLLER ASSEMBLY, TYPE 2 MOUNTING,
RADIO COMMUNICATIONS

MATERIAL – In accordance with Sections 952.2 and as follows:

Provide a controller unit that matches the existing controller unit, Eagle EPAC 300.

Provide an MSD Transnet 900 radio and power supply to match existing system radios for system communications.

Provide a YAGI antenna and cabling on mast arm shaft for radio connection. **CONSTRUCTION** – In accordance with Section 952.3 and as follows:

Install YAGI antenna on mast arm shaft and aim antenna towards the Penn and 4th intersection for system communications. Connect antenna and MSD radio with proper cabling recommended by the manufacturer. Connect radio to controller unit and power supply as recommended by the manufacturers. Test system communication to ensure proper connection and communications.

MEASUREMENT AND PAYMENT – In accordance with Section 952.4 and as follows:

Includes the radio, antenna, power supply, and all hardware to make fully functional communications with the signal system.

ITEM 9000-0001 - COMMUNICATIONS POWER CABLE

DESCRIPTION- This work is the furnishing and installing of cable and hardware to provide communications power from the traffic signal controller cabinet to the point on the support shaft above the mast arm.

MATERIALS - Sections 954.2 and as follows:

Provide power and grounding cable suitable for the power of the cities surveillance camera system with weatherability characteristics suitable for outdoor exposed installation and to power the cities' camera system from the traffic signal controller cabinet to the weather-proof gang box suitable for outdoor use.

Provide a Seal proof 1 Gang Weatherproof Rectangular powder coated Electrical Outlet Box, Single Gang, with Solid Cover, UL Listed and all mounting hardware.

CONSTRUCTION - Section 950.3, 954, and as follows:

Install the gang box on the traffic signal support shaft between the top of the shaft and the mast arm connection. Provide appropriate cable in the gang box for connection to power cables from the camera control box (supplied by others). Connect to electric power in the traffic signal controller cabinet. Make the electric connection in coordination with the cities camera contractor. Contact the City Police Department, Sgt. Steven Anderson, 610-655-6463 for coordination with the contractor and energizing/providing the electrical connection.

MEASUREMENT AND PAYMENT- Linear Foot. Includes providing and installing the gang box, all hardware for the installation, connection of the electric power in the signal controller cabinet and coordination with the cities' camera contractor.

ITEM No. 9000-0002 DECORATIVE PEDESTRIAN STREET LIGHT POLE LECHMERE
STEEL POST AND ARM AND LUMINAIRE, POWDER COATED

DESCRIPTION – This work is the furnishing, installation, wiring and energizing of a powder coated decorative pedestrian street light pole Lechmere Steel post and arm and luminaire in Hunter Green color, FHWA Color no. 24066.

MATERIAL – Section 910.2, 1101, and as follows:

Provide a Lechmere 14'-0" Steel Post with the Lechmere Crook and the Columbia Uni-body LED Luminaire, manufactured by Spring City Electrical Manufacturing Company, P.O.Box 19, Spring City, PA 19475 to match existing pedestrian street lighting poles and fixtures. Shaft catalog no. SSHSM-G17- 07.00-14.00-TN2.88/5.00-GFWN-CU and base catalog no. IWBLCH-19-CU. Provide a Lechmere Crook Single arm, catalog no. AARLCH-1S-28-57-TN2.38/NTP-TT1-CU. Provide a Columbia Uni-Body 120 Watt LED luminaire, catalog no. ALWCLU-LE185/EVX/X2-40-CR3-CR3-GPLO-LAYBG-CU.. Provide a 120 Volt twist lock photo control mounted on top of Crook single arm. Provide a GFCI receptacle with weather proof cover (not weather proof while in use). Submit shop drawings for review and approval before manufacture of the pole.

Provide supports with powder coating using Urethane or Triglycidyl Isocyanurate (TFIC) Polyester Powder finish for the traffic signal support. Provide a sample and corresponding Federal Color Number, that conforms to the color specified, to Municipality for approval at least 60 days before ordering the traffic signal support pole. Clamps, brackets, banding, strapping and/or connections placed on powder coated supports shall match the color of the support.

Powder coated support is to be galvanized with surfaces mechanically etched by brush blasting followed by preheating of the zinc coated substrate to a temperature of 450F for a minimum of one hour in a gas fired convection oven. Apply powder coating electrostatically and cure in a gas-fired convection oven by heating the zinc coated substrate to a minimum of 350F and a maximum temperature of 400F. Provide thermosetting powder resin that provides both intercoat as well as substrate fusion adhesion that meets 5A or 5B according to ASTM D3359.

Supports are to be wrapped in 3/16 inch thick ultra-violet inhibited plastic-backed foam and cradled in a 1.0-inch thick rubberized foam base for transportation. Provide painted matching hardware for the powder coated support.

CONSTRUCTION – Section 910.3, 1101, and as follows:

Install powder coated decorative pedestrian street light pole, arm and luminaire on the existing foundation with nylon slings to preserve the integrity of the coating. Pad and handle all components during loading, unloading, and installation. If the coating becomes chipped, scratched, blistered, or otherwise damaged, it must be repaired to the coating manufacturer's recommendations at no additional cost to the municipality. Make all the necessary electrical connections to make the pedestrian street light functional.

MEASUREMENT AND PAYMENT – Each. Includes all necessary electrical hardware, cabling and connections to make a functional pedestrian street light with the adjacent pedestrian street lights. This item is to be billed separately from all other work.

II. 9000-0003 EACH LED LUMINAIRE, 250 WATT EQUIVALENT, ARM MOUNT

DESCRIPTION - In accordance with Sections 910.1 and 1101 and as follows: This work is the furnishing and installation of a 250 watt equivalent arm-mounted LED luminaire.

MATERIAL - In accordance with Sections 910.2, 1101.06(b), and as follows:

Provide an arm-mounted LED luminaire that matches the existing city LED luminaires , LeoTek and provides the following: - 40 Type/F LEDs - 120-277 Volts - 4000K color temperature - IESNA Type 2 distribution - 1 A drive current - ANSI 7-wire photocontrol receptacle -Lighting Fixtures are to be aimed straight down, are to have flat lenses and are to meet IESNA full-cutoff criteria, or -Lighting Fixtures BUG Ratings, as defined in TM-15-07, are to prohibit any uplight whatsoever to provide an uplight rating of U0.

CONSTRUCTION - In accordance with Sections 910.3 and as follows: In accordance with manufacturer's instructions. Provide luminaires with a weather resistant decal that shows the lamp wattage and lumens.

MEASUREMENT AND PAYMENT - Each

CERTIFICATE OF ACKNOWLEDGMENT OF RECEIPT OF ADDENDUM

THE CITY OF READING

ADDENDUM NO. 1

BID: 2022 Traffic Signal Repair

DUE DATE: March 16, 2022
3:00 P.M. Prevailing Time

This addendum must be signed, attached to, and returned with your proposal to the City of Reading by the time and date indicated ABOVE.

Q1. What is the estimated value?

A1. The estimated cost is \$234,400.00.

Q2. Does this project have an estimate value or sign in sheet from the pre-bid meeting

A2. The pre-bid had 1 bidder listed as Telco. Please see question 1 for value.

Q3. Item # 0951-0130 Is this Mast arm required? Where is it located? Could not find it on any of the intersection plans provided.

A3. The 30 foot mast arm is not being used on the project, no quantity noted.

I, HEREBY CERTIFY THAT THE CHANGES COVERED BY THIS ADDENDUM HAVE BEEN TAKEN INTO ACCOUNT.

Firm Name (Type or Print)_____

Authorized Signature _____

Title_____

Name (Type or Print)_____

Date_____

CERTIFICATE OF ACKNOWLEDGMENT OF RECEIPT OF ADDENDUM

THE CITY OF READING

ADDENDUM NO. 2

BID: 2022 Traffic Signal Repair

DUE DATE: March 16, 2022
3:00 P.M. Prevailing Time

This addendum must be signed, attached to, and returned with your proposal to the City of Reading by the time and date indicated ABOVE.

Please be advised the prevailing wage rates are posted on Pennbid and the City of Reading website.
Please sign this document to confirm you have received the wage rates.

I, HEREBY CERTIFY THAT THE CHANGES COVERED BY THIS ADDENDUM HAVE BEEN TAKEN INTO ACCOUNT.

Firm Name (Type or Print)_____

Authorized Signature _____

Title_____

Name (Type or Print)_____

Date_____

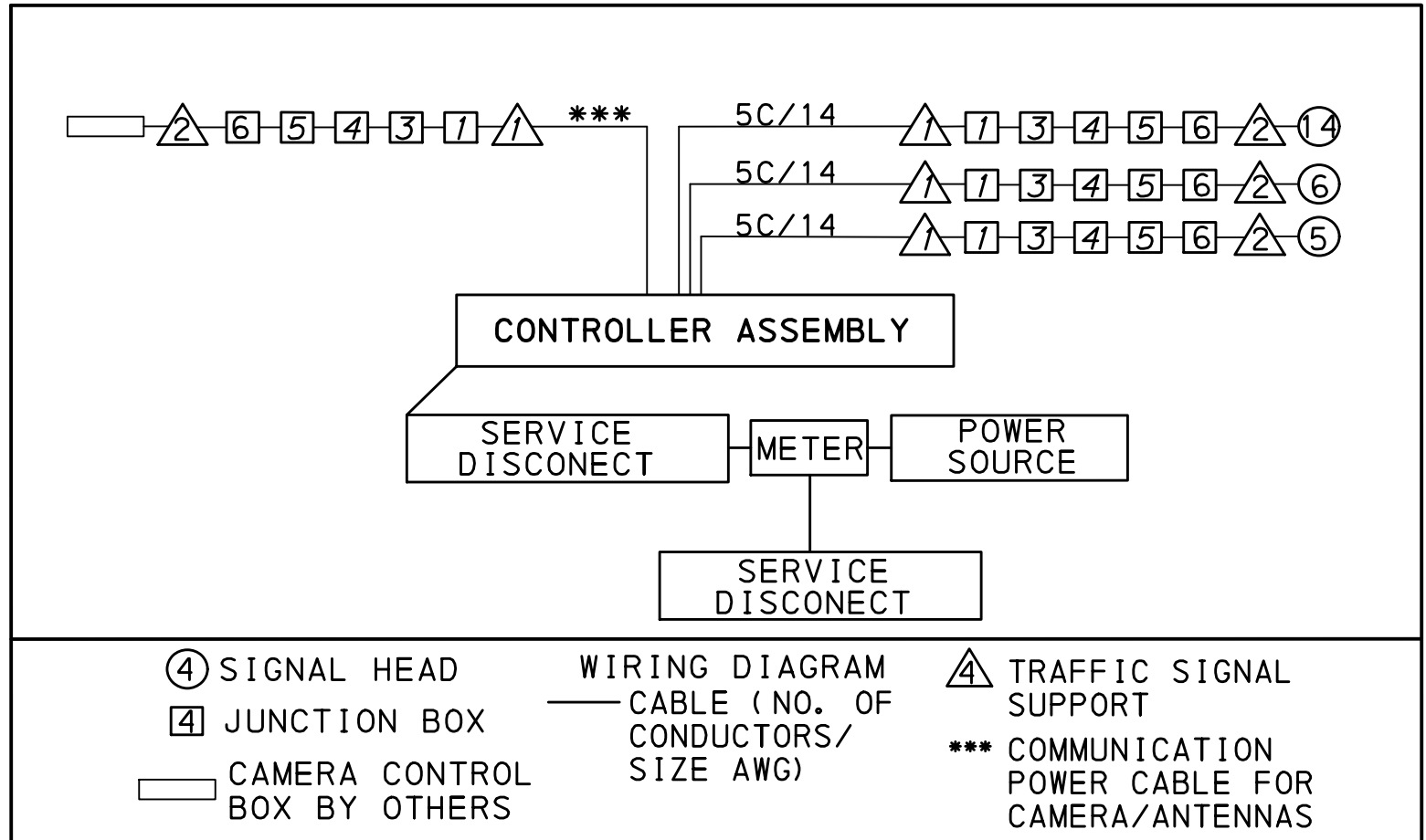
PROGRAM CHART													
EVENT NO.	M	T	W	T	F	S	S	TIME		CYCLE	OFFSET (SEC.)x	PROGRAM	REMARKS
								HR.	MIN. SEC.				
1	X	X	X	X	X	X	X	22	00 .00.	60	10	4	-----
2	X	X	X	X	X	-	-	06	00 .00.	80	1	1	-----
3	X	X	X	X	X	-	-	09	00 .00.	70	22	2	-----
4	X	X	X	X	X	-	-	15	00 .00.	80	72	3	-----
5	X	X	X	X	X	-	-	19	00 .00.	70	22	2	-----
6	-	-	-	-	-	X	X	06	00 .00.	70	22	2	-----
7	-	-	-	-	-	-	-			90	31	5	EVENT
--	-	-	-	-	-	-	-						
--	-	-	-	-	-	-	-						
--	-	-	-	-	-	-	-						

* OFFSET REFERENCED TO START OF GREEN, PHASE 2+6, INTERVAL 1.




CONSTRUCTION NOTE:

*MAST ARM & STREET LIGHT TO BE PAINTED
HUNTER GREEN, FEDERAL COLOR SPEC. #24066

* REMOVE NEAR-SIDE SIGNAL HEAD ON THE NORTH-EAST CORNER OF THE INTERSECTION



2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
 Arrow Custom - 8.2" 180"; "South", ClearviewHwy-3-W;
 2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
 4th", ClearviewHwy-3-W; "St", ClearviewHwy-3-W;
 2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
 "North", ClearviewHwy-3-W;
 Table of distances between letter and object lefts


SIGN TABULATION **				
PLAN SYMBOL	SERIES	SIZE	QTY	REMARKS
	R10-11	30X36	2	NO TURN ON RED
	R3-20	30X24	2	6 AM TO 6 PM MON - FRI
	R6-2R	30X36	1	ONE WAY 
	R4-7	18X24	1	KEEP RIGHT
	W16-1D	18X18	1	HAZARD MARKER
	R3-4	30X30	1	NO U-TURN
	R6-2L	30X36	1	 ONE WAY
	R3-7L	30X30	1	LEFT LANE MUST TURN LEFT
	W11-2	30X30	1	PEDESTRIAN CROSSING
	R10-4	9X12	8	PUSH BUTTON FOR WALK SIGNAL
	R3-6SR	30X36	1	OPTIONAL RIGHT TURN
	R3-6SL	30X36	1	OPTIONAL LEFT TURN
* 	D3-1	16X84	1	 4th St  North
* 	D3-1	16X84	1	North  4th St  South
* 	D3-1	16X82	1	400 Penn St 300

* Overhead street name signs to be structure mounted flat sheet aluminum with stiffeners. Overhead street name signs to consist of white legend and border on green background.

** All signs to utilize retroreflectorized Type III, IV, VI, VII, VIII, IX, or X sheeting for legend, border, and background.



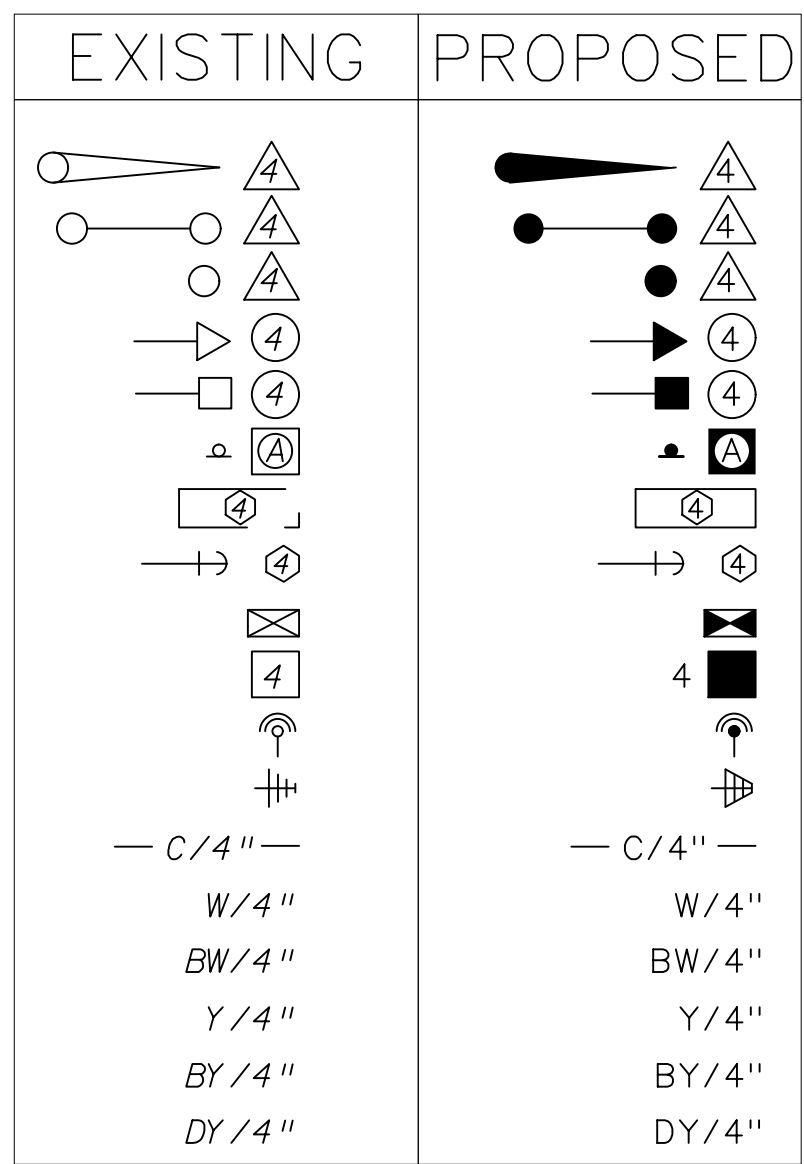
2.5" Radius, 0.0" Border, 1.0" Indent, White on Green;
 "North", Clearview Hwy-3-W;
 2.5" Radius, 1.0" Border, 1.0" Indent, White on Green;
 4th", Clearview Hwy-3-W; "St" Clearview Hwy-3-W;
 2.5" Radius, 1.0" Border, 1.0" Indent, White on Green;
 Arrow Custom - 8.2" 0"; "South", Clearview Hwy-3-W;
 Table of distances between letter and object lefts

4.0	N	o	r	t	h		
4.0	4.0	3.8	2.2	2.7	2.6	3.8	
3.0	a	t	h	s	t		
	6.8	5.4	11.0	6.4	3.4	3.0	
10.4		8.2	4.0				
3.0	s	o	u	t	h		
	3.4	3.8	3.3	2.7	2.6	4.0	

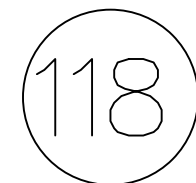


"400", ClearviewHwy-3-W;
 "Penn", ClearviewHwy-3-W; "St", ClearviewHwy-3-W;
 2.5" Radius, 1.0" Border, 1.0" Indent, White on Green;
 "300", ClearviewHwy-3-W;
 2.5" Radius, 1.0" Border, 1.0" Indent, White on Green;
 Table of distances between letter and object lefts
 2.5" Radius, 1.0" Border, 1.0" Indent, White on Green;

4,4	4	0	0	3,0			
	3,6	3,8	3,0				
3,0	2	8	n	5	1		
	7,0	7,3	7,4	11,7	6,3	3,6	3,0
3,0	3	0	0				
	3,4	3,8	3,0	4,4			



- MAST ARM
- STRAIN POLE/MESSENGER CABLE
- PEDESTAL
- VEHICULAR SIGNAL HEAD
- PEDESTRIAN SIGNAL HEAD
- SIGN
- VEHICLE DETECTOR
- PEDESTRIAN PUSH BUTTON/SIGN
- CONTROLLER ASSEMBLY
- JUNCTION BOX
- OMNI DIRECTIONAL ANTENNA
- YAGI ANTENNA
- CONDUIT/SIZE
- SOLID WHITE LINE/WIDTH
- BROKEN WHITE LINE/WIDTH
- SOLID YELLOW LINE/WIDTH
- BROKEN YELLOW LINE/WIDTH
- DOUBLE SOLID YELLOW LINE/WIDTH



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2012		1 OF 10
PERMIT NO.: 06-301-118		SHEET 2 OF 3		
DATE ISSUED: 8-15-62		DATE REVISED: 1-6-21		

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2012		2 OF 10
PERMIT NO.: 06-301-118		SHEET	3	OF 3
DATE ISSUED 8-15-62		DATE REVISED: 1-6-21		

STRUCTURE NO.	ITEM NO.	ROUTE	STATION	SIDE	Off-set	H	K	L	MAST ARM										
									Arm A										
									Signal Location					Sign Location					W
									M	N	O	P	Q	R	S	T	U	Y	
△	4951-0135	PENN ST	11+53.12	LT	35.2'	19'	10'	35'	32'	22'				17'				12'	0°
Totals																			

- VERTICAL POLES AND MAST ARMS TO BE DESIGNED BY MANUFACTURER TO ADEQUATELY SUPPORT LOADS AS SHOWN ON THE PLAN OR MAXIMUM LOAD REQUIREMENTS ESTABLISHED BY AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WHICH EVER IS GREATER.
- ITEM 4951-0135, STRUCTURE NO.2 IS TO BE FACTORY PAINTED, HUNTER GREEN, FHWA COLOR NO. 24066

ELECTRICAL DISTRIBUTION SYSTEM														
Description	1 Inch Conduit	2 Inch Conduit	3 Inch Conduit	Trench and Backfill, Type I	Trench and Backfill, Type II	Trench and Backfill, Type III	Signal Cable 14 AWG - 3 Conductor	Signal Cable 14 AWG - 5 Conductor	Signal Cable 14 AWG - 7 Conductor	Junction Box JB - 26	Junction Box JB - 27	Electrical Service, Type B	Detector Lead In Cable	Communications Power Cable
Item Number	0954 0011	0954 0012	0954 0013	0954 0151	0954 0152	0954 0153	0954 0201	0954 0202	0954 0203	0954 0301	0954 0302	0954 0402	0956 0001	9000 0001
Unit Location	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	L.F.	L.F.
△ to JB6			11		11					1				
SEE WIRING DIAGRAM							868							
TOTALS			11		11		868			1				280

MISCELLANEOUS ITEMS			
Item No.	Quan.	Unit	Description
0955-3208	2	EA	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS, LED LENSES
0955-3722	1	EA	LED COUNTDOWN PEDESTRAIN SIGNAL HEAD, TYPE A
9000-0002	1	EA	DECORATIVE PEDESTRIAN STREET LIGHT POLE, LECHMERE STEEL POST AND ARM AND LUMINAIRE, POWDER COATED

FLAT SHEET ALUMINUM SIGN TABULATION									
Symbol	Series	Size	Area Each (Sq. Ft.)	Remarks	Quantity Each		Item Number		
					Post Mounted	Pole Mounted	931-0001	932-0001	936-0200
							Post Mount Type B S.F.	Post Mount Type C S.F.	Structure Mounted S.F.
G	R6-2L	30 "x36 "	7.5	→ ONE WAY		1			7.5
S	D3-4	16 "x84 "	9.33	↕ South 4th St North		1			9.33
				TOTALS		2			16.88


CONSTRUCTION NOTES:
1. THIS WORK IS TO BE FURNISHED, INSTALLED AND OPERATED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE SPECIAL PROVISIONS OF THIS CONTRACT.
2. INSTALL 35 FOOT TRAFFIC SIGNAL MAST ARM AND FOUNDATION, POLE NO. 2 ON NORTHWEST CORNER. SCHEDULE POLE SPOT WITH PENNDOT 5-0 TRAFFIC SIGNAL SECTION AND CITY OF READING REPRESENTATIVES PRIOR TO PLACING THE ORDER OF THE POLES.
3. INSTALL 3 INCH CONDUIT FROM EXISTING MAST ARM FOUNDATION LOCATION TO NEW MAST ARM FOUNDATION. REPAIR/ REPLACEMENT OF SIDEWALK FOR TRENCHING AND BACKFILL OPERATION IS INCIDENTAL TO THE TRENCHING AND BACKFILL ITEM.
4. INSTALL JUNCTION BOX NO.6 AT THE LOCATION OF THE EXISTING MAST ARM FOUNDATION, EXCAVATE THE EXISTING FOUNDATION TO A DEPTH TO ACCEPT THE JUNCTION BOX SO THAT THE BOX IS LEVEL WITH THE SURROUNDING SIDEWALK. ANY TEMPORARY CABLING TO RETAIN THE CONTINUOUS OPERATION OF THE TRAFFIC SIGNAL IS INCIDENTAL TO THIS ITEM.
5. INSTALL SIGNAL CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM.
6. INSTALL COMMUNICATIONS POWER CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM. PROVIDE A SEALPROOF 1-GANG WEATHERPROOF OUTLET BOX WITH SOLID COVER ON THE POLE SHAFT ABOVE THE MAST ARM AND PROVIDE SUFFICIENT CABLE FOR CONNECTION TO THE CAMERA CONTROL BOX (PROVIDED BY OTHERS). CONTACT THE CITY OF READING POLICE DEPARTMENT, SGT. STEVEN ANDERSON AT 610-655-6463 FOR ALL COORDINATION WITH THE CITY OF READING CAMERA CONTRACTOR AND CONNECTION (ENERGIZING) OF COMMUNICATION POWER CABLE IN THE SIGNAL CONTROLLER CABINET.
7. INSTALL THE TRAFFIC SIGNAL INDICATIONS AND THE SIGNING ON THE NEW TRAFFIC SIGNAL MAST ARM POLE.
8. INSTALL THE PEDESTRIAN DECORATIVE STREET LIGHT POLE INCLUDING LUMINAIRE ON THE EXISTING PEDESTRAIN STREET LIGHT FOUNDATION. THIS ITEM TO BE INVOICED SEPARATELY TO THE CITY OF READING.
9. REMOVE EXISTING TEMPORARY TRAFFIC SIGNALS AND APPURTENANCES ON THE NW AND NE CORNERS. REMOVAL OF THESE ITEMS IS INCIDENTAL TO THE VEHICULAR SIGNAL INDICATIONS ITEM, 0955-3203.
10. REMOVED TRAFFIC SIGNAL EQUIPMENT/ APPURTENANCES IS TO BE RETURNED TO THE CITIES' PUBLIC WORKS FACILITY AT 503 NORTH 6TH STREET, READING PA.

County: BERKS
Municipality: READING
Intersection: SR 2003 (4th STREET)
and PENN STREET

Reviewed: _____
Municipal Official Date

Reviewed: _____
District Traffic Signals Div. Date

Recommended: _____
District Traffic Engineer Date

Scale: 

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS			4 OF 10
PERMIT NO.:06-301-139		SHEET 3 OF 3		
DATE ISSUED: 1-25-49		DATE REVISED: 10-31-88		

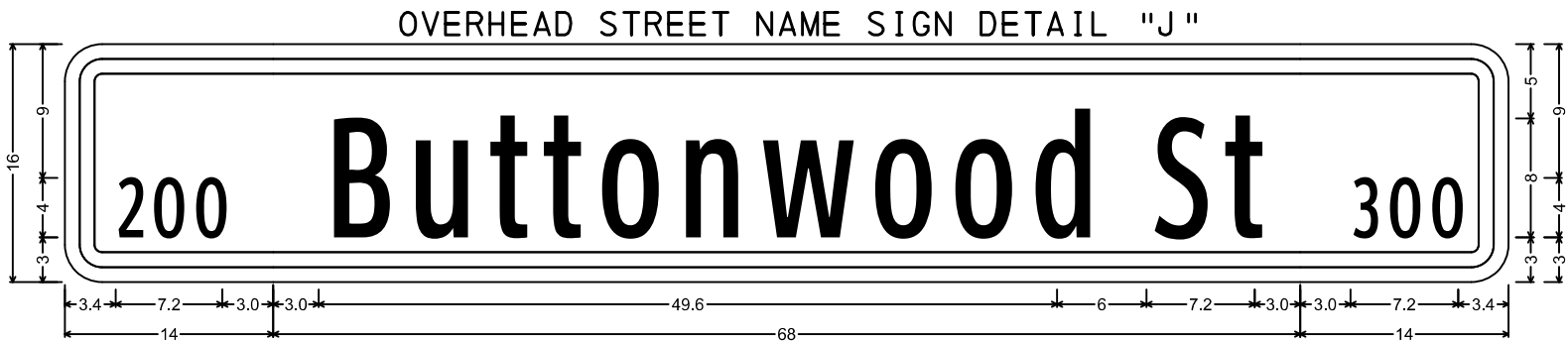
STRUCTURE NO.	ITEM NO.	ROUTE	STATION	SIDE	Off-set	H	K	L	MAST ARM										
									Arm A										
									Signal Location					Sign Location					W
									M	N	O	P	Q	R	S	T	U	Y	
△	0951-0125	N 3rd ST	102+10.37	RT	20.1'	19'		25'	25'	13'								6'	0°
Totals																			

- VERTICAL POLES AND MAST ARMS TO BE DESIGNED BY MANUFACTURER TO ADEQUATELY SUPPORT LOADS AS SHOWN ON THE PLAN OR MAXIMUM LOAD REQUIREMENTS ESTABLISHED BY AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WHICH EVER IS GREATER.

MISCELLANEOUS ITEMS			
Item No.	Quan.	Unit	Description
0955-3208	2	EA	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS, LED LENSES
4952-1041	1	EA	NEMA TS-2, TYPE 2 CONTROLLER ASSEMBLY, TYPE 2 MOUNTING, CAMERA SURVEILLANCE CONNECTION

ELECTRICAL DISTRIBUTION SYSTEM													
Description	1 Inch Conduit	2 Inch Conduit	3 Inch Conduit	Trench and Backfill, Type I	Trench and Backfill, Type II	Trench and Backfill, Type III	Signal Cable 14 AWG - 3 Conductor	Signal Cable 14 AWG - 5 Conductor	Signal Cable 14 AWG - 7 Conductor	Junction Box JB - 26	Junction Box JB - 27	Electrical Service, Type B	Detector Lead in Cable
Item Number	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	9000
Unit	0011	0012	0013	0151	0152	0153	0201	0202	0203	0301	0302	0402	0001
Location	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	L.F.
JB1 to △			8		8							1	
SEE WIRING DIAGRAM								800					
TOTALS			8		8			800				1	40

FLAT SHEET ALUMINUM SIGN TABULATION						
Symbol	Series	Size	Area Each (Sq. Ft.)	Remarks	Quantity Each	
					Post Mounted	Pole Mounted
					931-0001 S. F.	932-0001 S. F.
J	D3-4	16 "x96 "	10.67	STREET SIGN " 200 Buttonwood St 300"		1
				TOTALS		1



2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"200", ClearviewHwy-1-W 90% spacing;
2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"Buttonwood", ClearviewHwy-1-W 90% spacing; "St", ClearviewHwy-1-W;
2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"300", ClearviewHwy-1-W 90% spacing;
Table of distances between letter and object lefts

CONSTRUCTION NOTES:

- THIS WORK IS TO BE FURNISHED, INSTALLED AND OPERATED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE SPECIAL PROVISIONS OF THIS CONTRACT.
- INSTALL 25 FOOT TRAFFIC SIGNAL MAST ARM AND FOUNDATION, POLE NO. 1 ON NORTHEAST CORNER. SCHEDULE POLE SPOT WITH PENNDOT 5-0 TRAFFIC SIGNAL SECTION AND CITY OF READING REPRESENTATIVES PRIOR TO PLACING THE ORDER OF THE POLES.
- INSTALL 3 INCH CONDUIT FROM EXISTING JUNCTION BOX NO.1 LOCATION TO NEW MAST ARM FOUNDATION. REPAIR/ REPLACEMENT OF SIDEWALK FOR TRENCHING AND BACKFILL OPERATION IS INCIDENTAL TO THE TRENCHING AND BACKFILL ITEM.
- INSTALL SIGNAL CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM. ANY TEMPORARY CABLING TO RETAIN THE CONTINUOUS OPERATION OF THE TRAFFIC SIGNAL IS INCIDENTAL TO THIS ITEM.
- INSTALL COMMUNICATIONS POWER CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM. PROVIDE A SEALPROOF 1-GANG WEATHERPROOF OUTLET BOX WITH SOLID COVER ON THE POLE SHAFT ABOVE THE MAST ARM AND PROVIDE SUFFICIENT CABLE FOR CONNECTION TO THE CAMERA CONTROL BOX (PROVIDED BY OTHERS). CONTACT THE CITY OF READING POLICE DEPARTMENT, SGT. STEVEN ANDERSON AT 610-655-6463 FOR ALL COORDINATION WITH THE CITY OF READING CAMERA CONTRACTOR AND CONNECTION (ENERGIZING) OF COMMUNICATION POWER CABLE IN THE SIGNAL CONTROLLER CABINET.
- INSTALL THE TRAFFIC SIGNAL INDICATIONS AND THE SIGNING ON THE NEW TRAFFIC SIGNAL MAST ARM POLE.
- REMOVE EXISTING TEMPORARY TRAFFIC SIGNALS AND APPURTENANCES ON THE NE CORNER. REMOVAL OF THESE ITEMS IS INCIDENTAL TO THE VEHICULAR SIGNAL INDICATIONS ITEM, 0955-3203.
- ALL REMOVED TRAFFIC SIGNAL EQUIPMENT/ APPURTENANCES IS TO BE RETURNED TO THE CITIES' PUBLIC WORKS FACILITY AT 503 NORTH 6TH STREET, READING PA.

County: **BERKS**

Municipality: **READING**

Intersection: **N THIRD STREET
and BUTTONWOOD STREET**

Reviewed: _____

Municipal Official _____ Date _____

Reviewed: _____

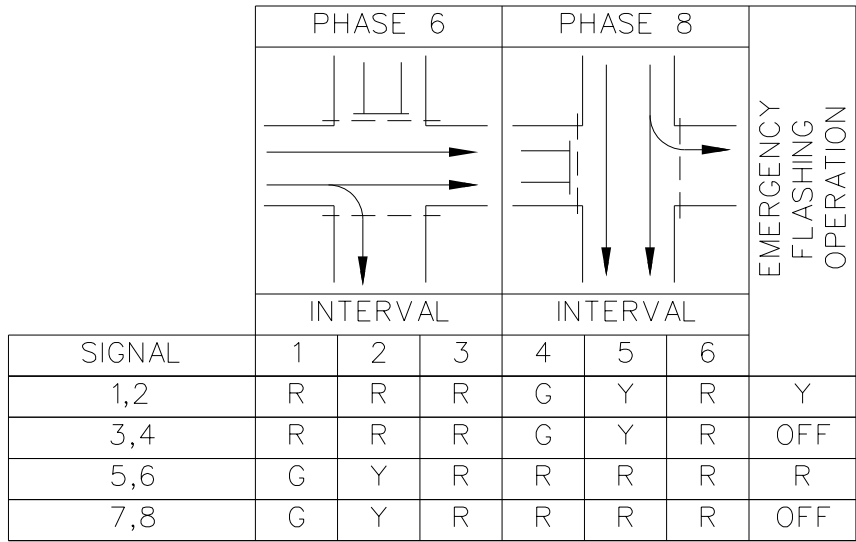
District Traffic Signals Div. _____ Date _____

Recommended: _____

District Traffic Engineer _____ Date _____

Scale: 20 0 20 40

MOVEMENT, SEQUENCE AND TIMING DIAGRAM



FIXED		3	2		3	2
MINIMUM						
PASSAGE						
MAXIMUM 1	29			31		
MAXIMUM 2	29			31		
PEDESTRIAN						
MEMORY	MR			MR		

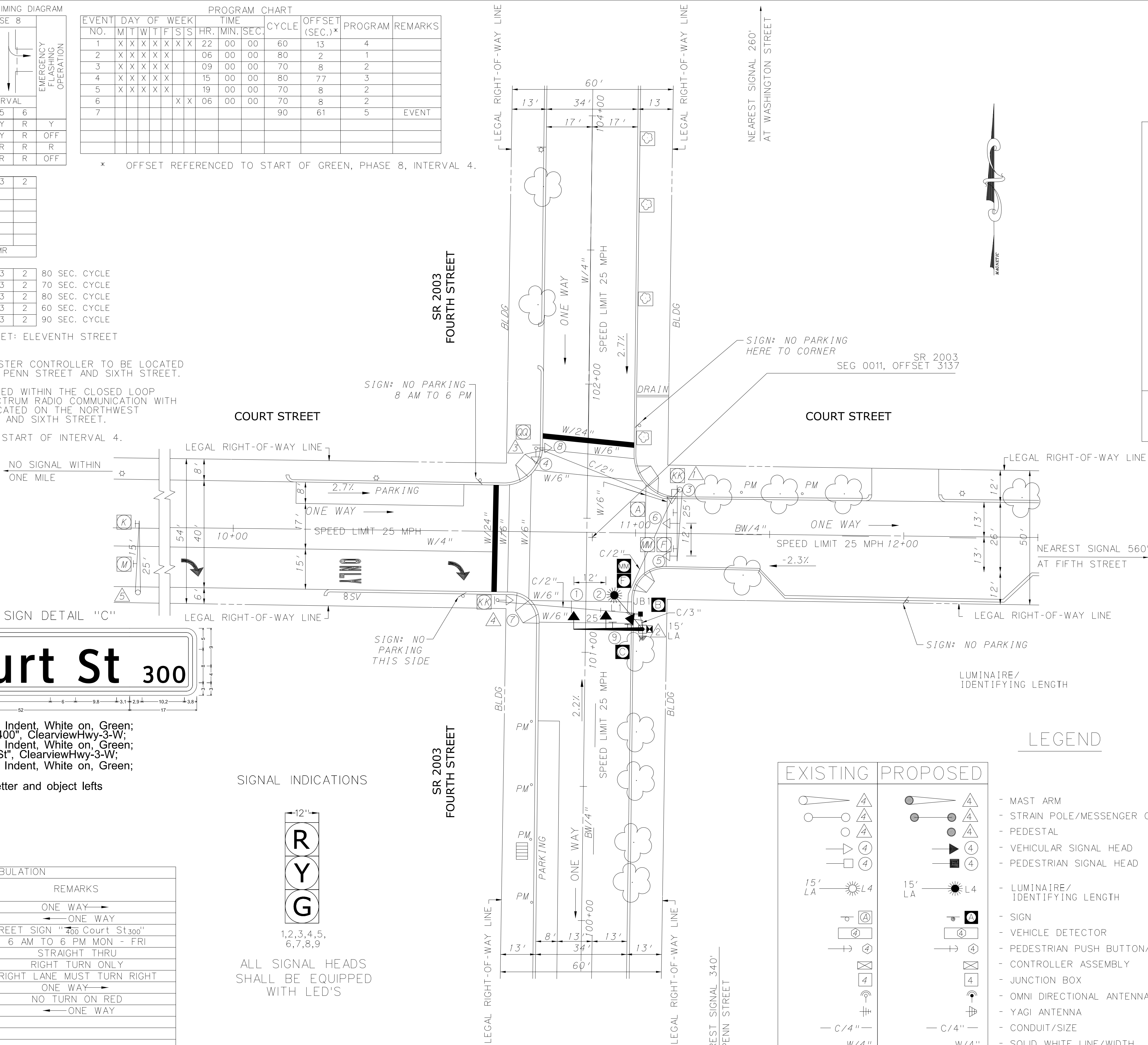
PROGRAM 1	34	3	2	36	3	2	80 SEC. CYCLE
PROGRAM 2	29	3	2	31	3	2	70 SEC. CYCLE
PROGRAM 3	31	3	2	39	3	2	80 SEC. CYCLE
PROGRAM 4	25	3	2	25	3	2	60 SEC. CYCLE
PROGRAM 5	37	3	2	43	3	2	90 SEC. CYCLE

- SYSTEM LIMITS: PENN STREET: ELEVENTH STREET TO SECOND STREET.
- CLOSED LOOP SYSTEM MASTER CONTROLLER TO BE LOCATED AT THE INTERSECTION OF PENN STREET AND SIXTH STREET.
- SIGNALS TO BE COORDINATED WITHIN THE CLOSED LOOP SYSTEM VIA SPREAD SPECTRUM RADIO COMMUNICATION WITH MASTER CONTROLLER, LOCATED ON THE NORTHWEST CORNER OF PENN STREET AND SIXTH STREET.
- OFFSETS REFERENCED TO START OF INTERVAL 4.

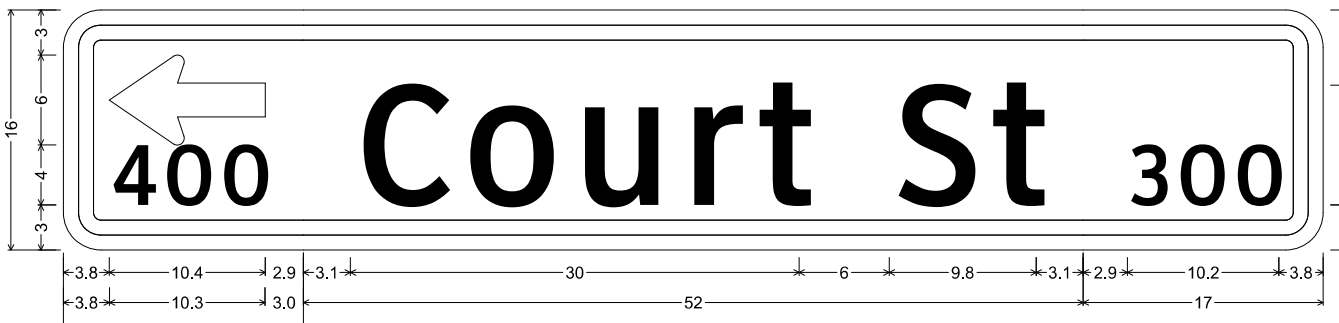
PROGRAM CHART

EVENT NO.	M	T	W	T	F	S	S	HR.	MIN.	SEC.	CYCLE	OFFSET (SEC.)*	PROGRAM	REMARKS
1	X	X	X	X	X	X	X	22	00	00	60	13	4	
2	X	X	X	X	X	X	X	06	00	00	80	2	1	
3	X	X	X	X	X	X	X	09	00	00	70	8	2	
4	X	X	X	X	X	X	X	15	00	00	80	77	3	
5	X	X	X	X	X	X	X	19	00	00	70	8	2	
6						X	X	06	00	00	70	8	2	
7											90	61	5	EVENT

* OFFSET REFERENCED TO START OF GREEN, PHASE 8, INTERVAL 4.



OVERHEAD SIGN DETAIL "C"



2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
Arrow Custom - 10.4" 180"; "400", ClearviewHwy-3-W;
2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"Court", ClearviewHwy-3-W; "St", ClearviewHwy-3-W;
2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"300", ClearviewHwy-3-W;
Table of distances between letter and object lefts

3.8	10.4	2.9
4	0	0
3.8	3.8	2.9
3.1	7.2	7.3
3.1	0	0
2.9	3.4	3.8

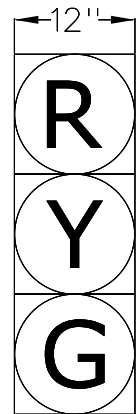
SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY	REMARKS
	R6-2R	30X36	1	ONE WAY →
	R6-2L	30X36	1	← ONE WAY
	D3-4	16X86	1	STREET SIGN "400 Court St 300"
	R3-20	30X24	1, 1	6 AM TO 6 PM MON - FRI
	R3-5S	30X36	1	STRAIGHT THRU
	R3-5R	30X36	1	RIGHT TURN ONLY
	R3-7R	30X30	1	RIGHT LANE MUST TURN RIGHT
	R6-1R	36X12	2	ONE WAY →
	R10-11	30X36	1, 1	NO TURN ON RED
	R6-2L	18X24	3	← ONE WAY

* OVERHEAD STREET NAME SIGNS TO BE STRUCTURE MOUNTED FLAT SHEET ALUMINUM WITH STIFFENERS. OVERHEAD STREET NAME SIGNS TO CONSIST OF WHITE LEGEND AND BORDER ON GREEN BACKGROUND.

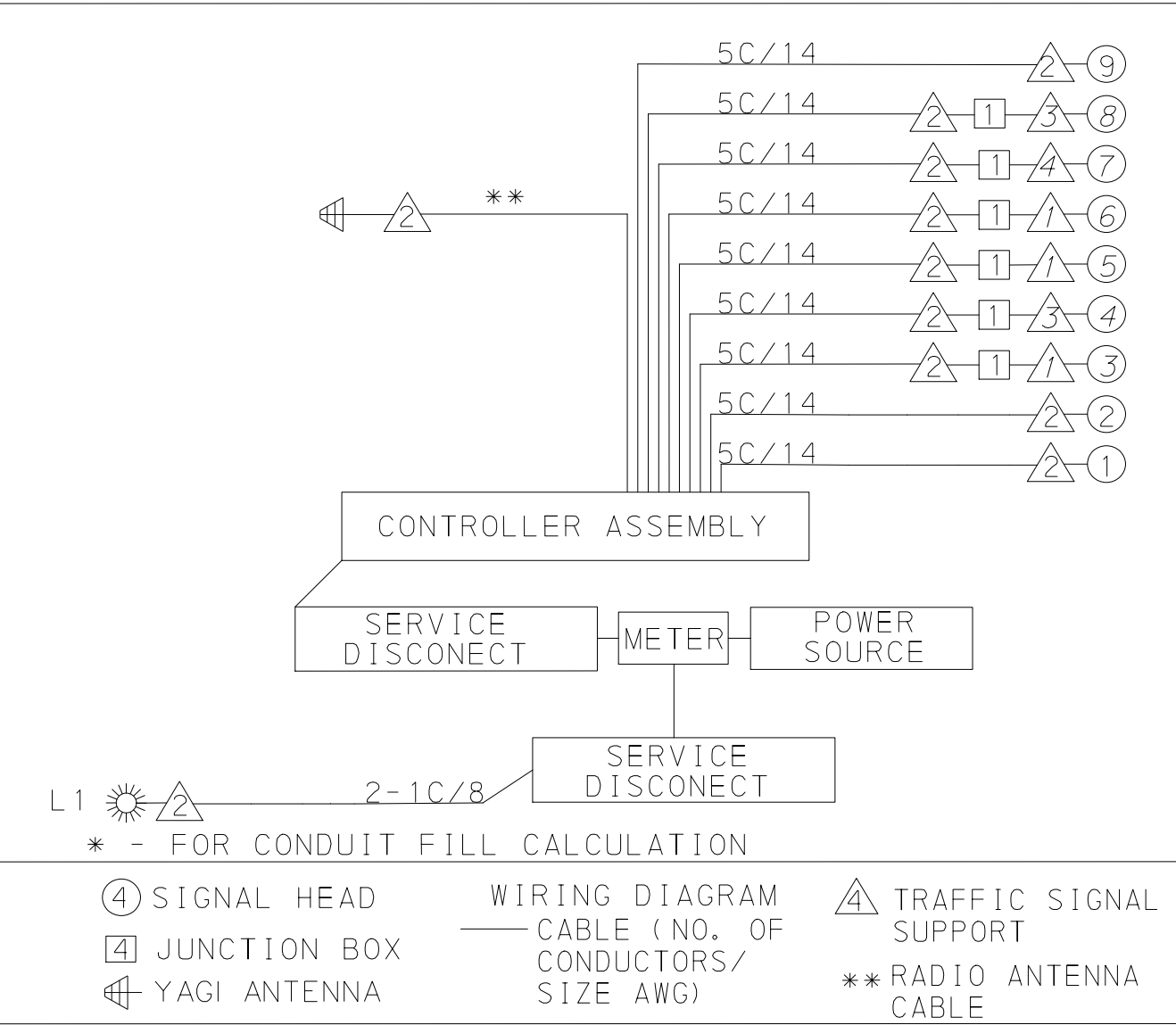
** ALL SIGNS TO UTILIZE RETROREFLECTORIZED TYPE III, IV, VI, VII, VIII, IX, OR X SHEETING FOR LEGEND, BORDER, AND BACKGROUND.

SIGNAL INDICATIONS



ALL SIGNAL HEADS SHALL BE EQUIPPED WITH LED'S

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2003		5 OF 10
CITY OF READING				
PERMIT NO.:	06-301-161	SHEET	2	OF 3
DATE ISSUED:	3-19-81	DATE REVISED:	2-24-11	



④ SIGNAL HEAD	WIRING DIAGRAM	△ TRAFFIC SIGNAL SUPPORT
□ JUNCTION BOX	CABLE (NO. OF CONDUCTORS/ SIZE AWG)	** RADIO ANTENNA CABLE
⦿ YAGI ANTENNA		

LEGEND

EXISTING	PROPOSED	
		- MAST ARM
		- STRAIN POLE/MESSENGER CABLE
		- PEDESTAL
		- VEHICULAR SIGNAL HEAD
		- PEDESTRIAN SIGNAL HEAD
		- LUMINAIRE/ IDENTIFYING LENGTH
		- SIGN
		- VEHICLE DETECTOR
		- PEDESTRIAN PUSH BUTTON/SIGN
		- CONTROLLER ASSEMBLY
		- JUNCTION BOX
		- OMNI DIRECTIONAL ANTENNA
		- YAGI ANTENNA
		- CONDUIT/SIZE
		- SOLID WHITE LINE/WIDTH
		- BROKEN WHITE LINE/WIDTH
		- SOLID YELLOW LINE/WIDTH
		- BROKEN YELLOW LINE/WIDTH
		- DOUBLE SOLID YELLOW LINE/WIDTH

County: BERKS
Municipality: CITY OF READING
Intersection: SR 2003 (FOURTH STREET) and COURT STREET

Reviewed: MUNICIPAL OFFICIAL Date

Reviewed: DISTRICT TRAFFIC SIGNAL DIV. Date

Recommended: DISTRICT TRAFFIC ENGINEER Date

Scale: 20 0 20 40

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2003		6 OF 10
CITY OF READING				
PERMIT NO.:		06-301-161	SHEET 3 OF 3	
DATE ISSUED:		3-19-81	DATE REVISED: 2-24-11	

STRUCTURE NO.	ITEM NO.	ROUTE	STATION	SIDE	Off-set	H	K	L	MAST ARM										LUMINAIRE ARM			
									Arm A										Arm C			
									Signal Location					Sign Location					W	G	X	Z
									M	N	O	P	Q	R	S	T	U	Y				
△	0951-2125	SR 2003	10+8.90	RT	21.3'	19'	10'	25'	25'	13'				11'	11'			4'	0°	15'	30'	45°
Totals																						

- VERTICAL POLES AND MAST ARMS TO BE DESIGNED BY MANUFACTURER TO ADEQUATELY SUPPORT LOADS AS SHOWN ON THE PLAN OR MAXIMUM LOAD REQUIREMENTS ESTABLISHED BY AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WHICH EVER IS GREATER.

MISCELLANEOUS ITEMS			
Item No.	Quan.	Unit	Description
0955-3208	3	EA	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS, LED LENSES
4952-1042	1	EA	NEMA TS2- TYPE 2 CONTROLLER ASSEMBLY, TYPE 2 MOUNTING, RADIO COMMUNICATIONS
9000-0003	1	EA	LED LUMINAIRE, 250 WATT EQUIVALENT, ARM MOUNT

ELECTRICAL DISTRIBUTION SYSTEM														
Desor iption	AWG 8 UNDERGROUND CABLE COPPER, 1 CONDUCTOR	1 Inch Conduit	2 Inch Conduit	3 Inch Conduit	Trench and Backfill, Type I	Trench and Backfill, Type II	Trench and Backfill, Type III	Signal Cable 14 AWG - 3 Conductor	Signal Cable 14 AWG - 5 Conductor	Signal Cable 14 AWG - 7 Conductor	Junction Box JB - 26	Junction Box JB - 27	Electrical Service, Type C	Detector Lead In Cable Communications Power Cable
Item Number	0910	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	9000
Unit	4116	0011	0012	0013	0151	0152	0153	0201	0202	0203	0301	0302	0403	0001
Location	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	L.F.
△ to JB1				5		5						1	1	
SEE WIRING DIAGRAM	100								790					
TOTALS	100			5		5			790			1	1	40

FLAT SHEET ALUMINUM SIGN TABULATION									
Symbol	Series	Size	Area Each (Sq. Ft.)	Remarks	Quantity Each		Item Number		
					Post Mounted	Pole Mounted	931-	932-	936-
							0001	0001	0200
							Post Mount Type B	Post Mount Type C	Structure Mounted
S. F.	S. F.	S. F.							
B	R6-2L	30"x36"	7.50	← ONE WAY		1			7.50
C	D3-4	16"x86"	9.56	STREET SIGN "400 Court St300"		1			9.56
F	R3-20	30"x24"	5.00	6 AM TO 6 PM MON - FRI		1			5.00
MM	R10-11	30"x36"	7.50	NO TURN ON RED		1			7.50
				TOTALS		4			29.56

- CONSTRUCTION NOTES:
1. THIS WORK IS TO BE FURNISHED, INSTALLED AND OPERATED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE SPECIAL PROVISIONS OF THIS CONTRACT.
2. INSTALL 25 FOOT TRAFFIC SIGNAL MAST ARM WITH A 15 FOOT LUMINAIRE ARM AND FOUNDATION, POLE NO. 2 ON SOUTHEAST CORNER. SCHEDULE POLE SPOT WITH PENNDOT 5-0 TRAFFIC SIGNAL SECTION AND CITY OF READING REPRESENTATIVES PRIOR TO PLACING THE ORDER OF THE POLES.
3. INSTALL 3 INCH CONDUIT FROM EXISTING POLE LOCATION (NEW JUNCTION BOX NO. 1 LOCATION) TO NEW MAST ARM FOUNDATION. REPAIR/REPLACEMENT OF SIDEWALK FOR TRENCHING AND BACKFILL OPERATION IS INCIDENTAL TO TRENCHING AND BACKFILL ITEM.
4. INSTALL NEW ELECTRICAL SERVICE, TYPE C ON NEW MAST ARM POLE.
5. INSTALL NEW CONTROLLER ASSEMBLY WITH RADIO COMMUNICATIONS ON NEW MAST ARM POLE.
6. INSTALL SIGNAL CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM. ANY TEMPORARY CABLING TO RETAIN THE CONTINUOUS OPERATION OF THE TRAFFIC SIGNAL IS INCIDENTAL TO THIS ITEM.
7. INSTALL SIGNAL COMMUNICATIONS YAGI ANTENNA WITH CABLE ON POLE.
8. INSTALL LUMINAIRE.
9. INSTALL THE TRAFFIC SIGNAL INDICATIONS AND THE SIGNING ON THE NEW TRAFFIC SIGNAL MAST ARM POLE.
10. REMOVE EXISTING TEMPORARY TRAFFIC SIGNALS AND APPURTENANCES ON THE SE CORNER. REMOVAL OF THESE ITEMS IS INCIDENTAL TO THE SIGNAL ITEMS.
11. ALL REMOVED TRAFFIC SIGNAL EQUIPMENT/ APPURTENANCES IS TO BE RETURNED TO THE CITIES' PUBLIC WORKS FACILITY AT 503 NORTH 6TH STREET, READING PA.

County:	BERKS
Municipality:	CITY OF READING
Intersection:	SR 2003 (FOURTH STREET) and COURT STREET

Reviewed:	
MUNICIPAL OFFICIAL	Date
Reviewed:	
DISTRICT TRAFFIC SIGNAL DIV.	Date
Recommended:	
DISTRICT TRAFFIC ENGINEER	Date
Scale:	<div><div></div><div>2002040</div></div>

PHASING TIMING and COLOR SEQUENCE CHART

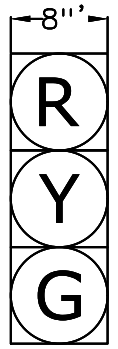
SIGNALS	PHASE 2+6			PHASE 4+8			EMERGENCY FLASHING OPERATION
	INTERVALS	INTERVALS	INTERVALS	INTERVALS	INTERVALS	INTERVALS	
1,2,3,4	G	Y	R	R	R	R	Y
5,6,7,8	R	R	R	G	Y	R	R
Fixed Time		3.5	1.5		3.5	1.5	
MAX 1	43			17			
MAX 2	48			17			
MAX 3	49			16			

PROGRAM CHART

EVENT NO.	DAY OF WEEK	TIME	MAX	CYCLE	OFFSET	REMARKS
1	*****	07:00:00	3	75	18.7	
2	*****	09:00:00	1	70	6.3	
3	*****	15:00:00	2	75	73.5	
4	*****	18:00:00	1	70	6.3	

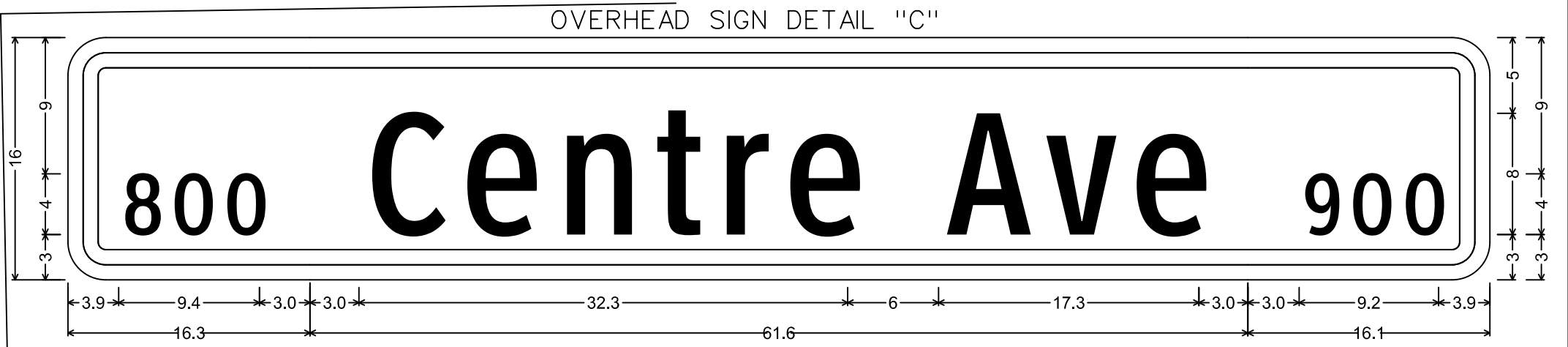
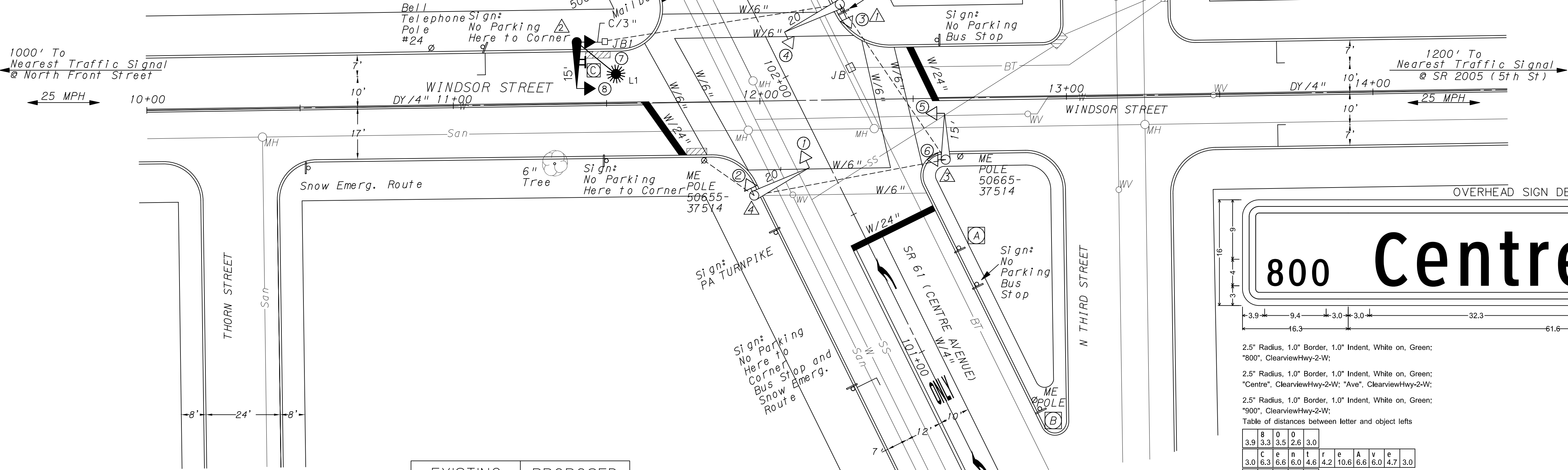
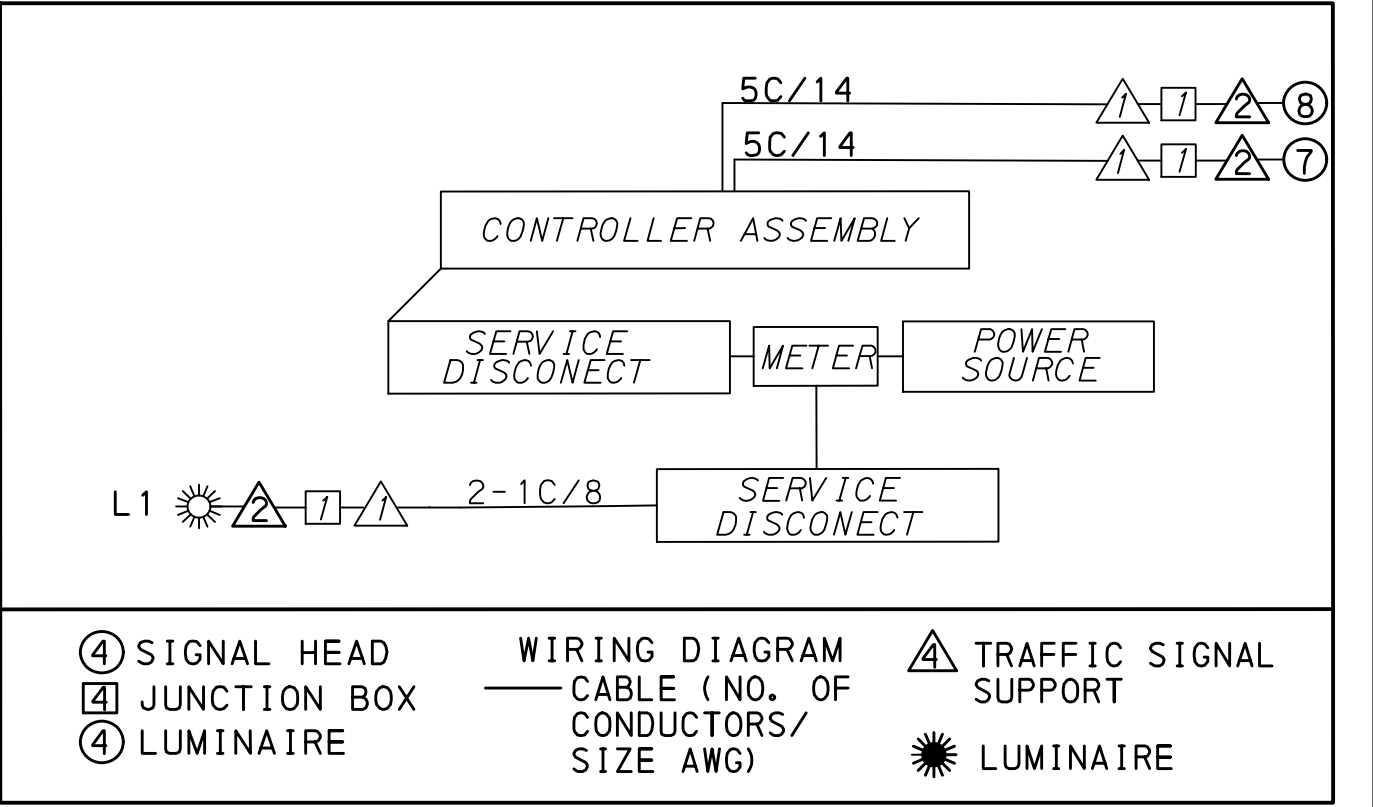
- ① OFFSETS REFERENCED TO START OF INTERVAL 1
② THIS INTERSECTION IS PART OF THE NORTHWEST NETWORK. THE MASTER INTERSECTION IS 5TH & ELM

SIGNAL INDICATIONS



1,2,3,4,
5,6,7,8

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2006		7 OF 10
READING				
PERMIT NO.:06-301-030		SHEET	2	OF 3
DATE ISSUED: 1-25-49		DATE REVISED:		



2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"800", ClearviewHwy-2-W;
2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"Centre", ClearviewHwy-2-W; "Ave", ClearviewHwy-2-W;
2.5" Radius, 1.0" Border, 1.0" Indent, White on, Green;
"900", ClearviewHwy-2-W;
Table of distances between letter and object lefts


8	0	0	0	0	3.0
3.9	3.3	3.5	2.6	3.0	
3.0	6.3	6.6	6.0	4.6	4.2
10.6	6.6	6.0	4.7	3.0	
9	0	0	0	3.9	
3.0	3.2	3.5	2.5	3.9	

PLAN SYMBOL	SERIES	SIZE	QTY.	
A	R3-1	30X30	1	NO RIGHT TURN (SYMBOL)
B	R3-7L	30X30	2	LEFT LANE MUST TURN LEFT
C	D3-1	16X94	1	STREET SIGN "800 Centre Ave 900"

* Overhead street name signs to be structure mounted flat sheet aluminum with stiffeners. Overhead street name signs to consist of white legend and border on green background.
** All signs to utilize retroreflectorized Type III, IV, VI, VII, VIII, IX, or X sheeting for legend, border, and background.

EXISTING	PROPOSED	LEGEND
		MAST ARM
		STRAIN POLE
		PEDESTAL
		VEHICULAR SIGNAL HEAD
		PEDESTRIAN SIGNAL HEAD
		SIGN
		VEHICLE DETECTOR
		PEDESTRIAN PUSH BUTTON
		LUMINAIRE
		PEDESTRIAN PUSH BUTTON/SIGN
		CONTROLLER ASSEMBLY
		SOLID WHITE LINE/WIDTH
		BROKEN WHITE LINE/WIDTH
		SOLID YELLOW LINE/WIDTH
		BROKEN YELLOW LINE/WIDTH
		DOUBLE SOLID YELLOW LINE/WIDTH

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2006		8 OF 10
READING				
PERMIT NO.:06-301-030		SHEET 3 OF 3		
DATE ISSUED: 1-25-49		DATE REVISED:		

STRUCTURE NO.	ITEM NO.	ROUTE	STATION	SIDE	Off- set	H	K	L	MAST ARM											
									Arm A											
									Signal Location					Sign Location						W
									M	N	O	P	Q	R	S	T	U	Y		
	0951-2115	WINDSOR ST	11+44.55	LT	20.13'	19'		15'	15'	0'								5'	0°	
Totals																				

- VERTICAL POLES AND MAST ARMS TO BE DESIGNED BY MANUFACTURER TO ADEQUATELY SUPPORT LOADS AS SHOWN ON THE PLAN OR MAXIMUM LOAD REQUIREMENTS ESTABLISHED BY AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WHICH EVER IS GREATER.

MISCELLANEOUS ITEMS			
Item No.	Quan.	Unit	Description
0955-2805	2	EA	VEHICULAR SIGNAL HEAD, THREE 8" SECTIONS,LED LENSES
9000-0003	1	EA	LED LUMANIARE, 250 WATT EQUIVALENT, ARM MOUNT

ELECTRICAL DISTRIBUTION SYSTEM															
Description	AWG 8 UNDERGROUND CABLE COPPER, 1 CONDUCTOR	1 Inch Conduit	2 Inch Conduit	3 Inch Conduit	Trench and Backfill, Type I	Trench and Backfill, Type II	Trench and Backfill, Type III	Signal Cable 14 AWG - 3 Conductor	Signal Cable 14 AWG - 5 Conductor	Signal Cable 14 AWG - 7 Conductor	Junction Box JB - 26	Junction Box JB - 27	Electrical Service,Type B	Detector Lead In Cable	Communications Power Cable
Item Number	0910	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0954	0956	9000
Unit	4116	0011	0012	0013	0151	0152	0153	0201	0202	0203	0301	0302	0402	0001	0001
Location	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	L.F.	L.F.
△ to JB1				10		10									
SEE WIRING DIAGRAM	300								260						
TOTALS	300			10		10			260						

FLAT SHEET ALUMINUM SIGN TABULATION									
Symbol	Series	Size	Area Each (Sq. Ft.)	Remarks	Quantity Each		Item Number		
					Post Mounted	Pole Mounted	931-0001	932-0001	936-0200
							Post Mount Type B S.F.	Post Mount Type C S.F.	Structure Mounted S.F.
G	D3-1	16 "x94 "	10.44	800 Centre Ave 900		1			10.44
				TOTALS		1			10.44

- CONSTRUCTION NOTES:
1. THIS WORK IS TO BE FURNISHED, INSTALLED AND OPERATED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE SPECIAL PROVISIONS OF THIS CONTRACT.
2. INSTALL 15 FOOT TRAFFIC SIGNAL MAST ARM AND FOUNDATION, POLE NO. 2 ON NORTHWEST CORNER. SCHEDULE POLE SPOT WITH PENNDOT 5-0 TRAFFIC SIGNAL SECTION AND CITY OF READING REPRESENTATIVES PRIOR TO PLACING THE ORDER OF THE POLES.
3. INSTALL 3 INCH CONDUIT FROM EXISTING MAST ARM FOUNDATION LOCATION TO NEW MAST ARM FOUNDATION. REPAIR/ REPLACEMENT OF SIDEWALK FOR TRENCHING AND BACKFILL OPERATION IS INCIDENTAL TO THE TRENCHING AND BACKFILL ITEM.
4. INSTALL SIGNAL CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM.
5. INSTALL THE TRAFFIC SIGNAL INDICATIONS AND THE SIGNING ON THE NEW TRAFFIC SIGNAL MAST ARM POLE.
6. INSTALL THE LUMINAIRE ON THE NEW TRAFFIC MAST ARM.
7. REMOVE EXISTING TEMPORARY TRAFFIC SIGNALS AND APPURTENANCES ON THE NW CORNER. REMOVAL OF THESE ITEMS IS INCIDENTAL TO THE VEHICULAR SIGNAL INDICATIONS ITEM, 0955-2803.
8. REMOVED TRAFFIC SIGNAL EQUIPMENT/ APPURTENANCES IS TO BE RETURNED TO THE CITIES' PUBLIC WORKS FACILITY AT 503 NORTH 6TH STREET, READING PA.

County: BERKS

Municipality: READING

Intersection: SR 61 (CENTRE AVENUE)
WINDSOR STREET

Reviewed: _____

Municipal Official _____ Date _____

Reviewed: _____

District Traffic Signals Div. _____ Date _____

Recommended: _____

District Traffic Engineer _____ Date _____

Scale: 

30

MOVEMENT, SEQUENCE AND TIMING DIAGRAM									
	PHASE 2 + 6				PHASE 4 + 8				EMERGENCY FLASHING OPERATION
INTERVAL	1	2	3	4	5	6	7	8	
SIGNAL									
1,2,3,4	G	G	Y	R	R	R	R	R	Y
5,6,7,8	R	R	R	R	G	G	Y	R	R
9,10,11,12	M	FH	H	H	H	H	H	H	OFF
13,14,15,16	H	H	H	H	M	FH	H	H	OFF

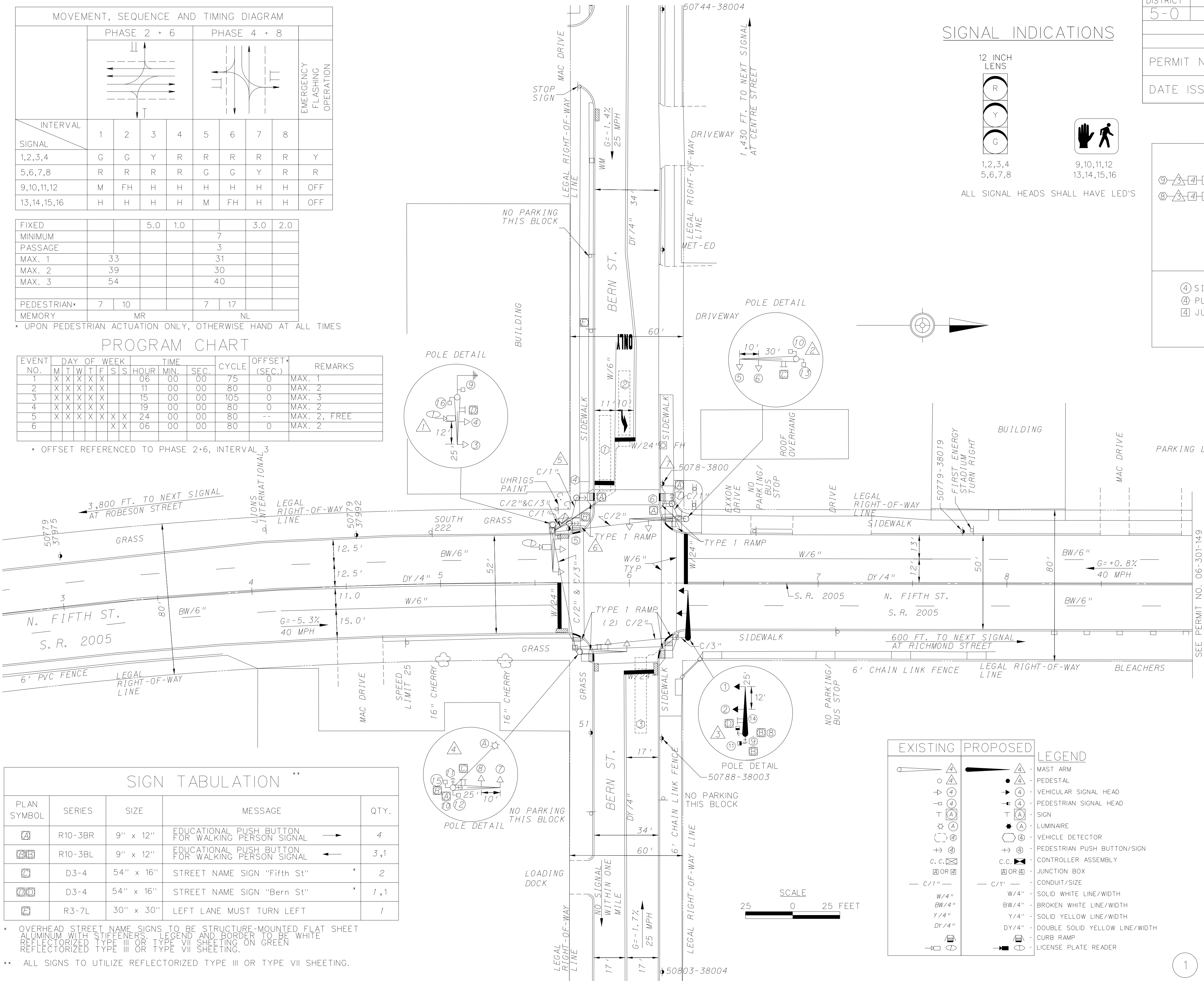
FIXED				5.0	1.0		3.0	2.0
MINIMUM						7		
PASSAGE						3		
MAX. 1		33				31		
MAX. 2		39				30		
MAX. 3		54				40		
PEDESTRIAN*	7	10			7	17		
MEMORY		MR			NL			

* UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND AT ALL TIMES

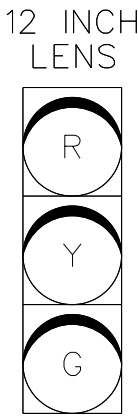
PROGRAM CHART

EVENT NO.	M	T	W	T	F	S	S	HOUR	MIN.	SEC.	CYCLE	OFFSET* (SEC.)	REMARKS
1	X	X	X	X	X			06	00	00	75	0	MAX. 1
2	X	X	X	X	X			11	00	00	80	0	MAX. 2
3	X	X	X	X	X			15	00	00	105	0	MAX. 3
4	X	X	X	X	X			19	00	00	80	0	MAX. 2
5	X	X	X	X	X	X	X	24	00	00	80	--	MAX. 2, FREE
6						X	X	06	00	00	80	0	MAX. 2

* OFFSET REFERENCED TO PHASE 2+6, INTERVAL 3



SIGNAL INDICATIONS



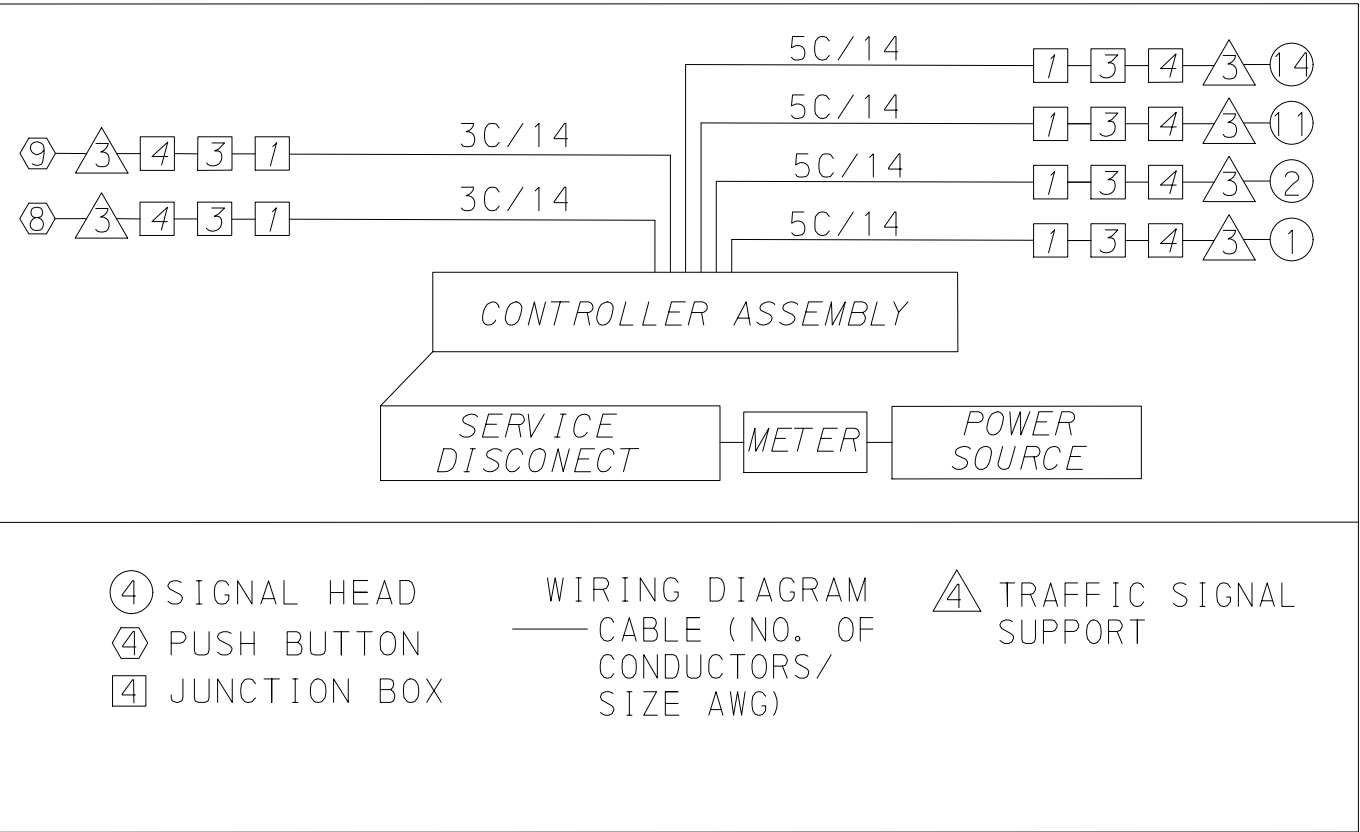
1,2,3,4
5,6,7,8



9,10,11,12
13,14,15,16

ALL SIGNAL HEADS SHALL HAVE LED'S

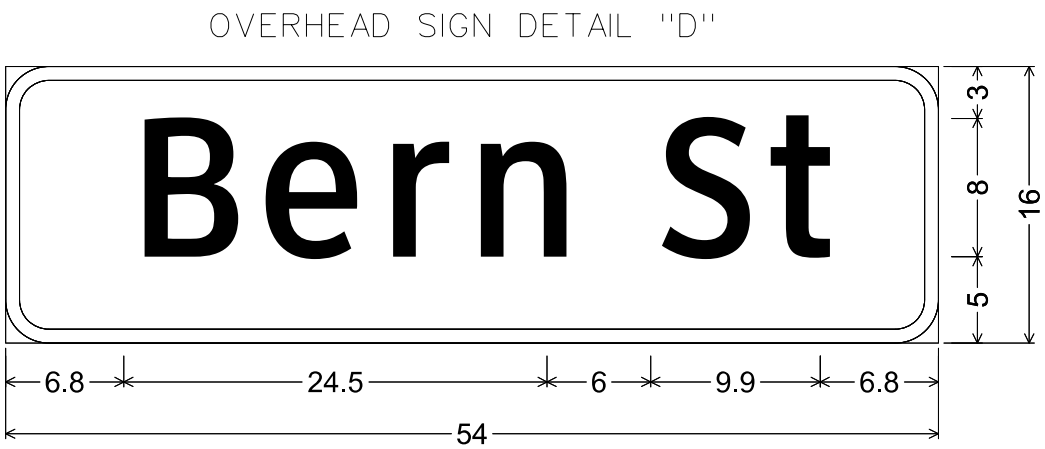
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2005		9 OF 10
PERMIT NO.:06-301-001		SHEET 2 OF 3		
DATE ISSUED: 3-2-55		DATE REVISED:		



SIGN TABULATION **					
PLAN SYMBOL	SERIES	SIZE	MESSAGE	QTY.	
	R10-3BR	9" x 12"	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL →	4	
	R10-3BL	9" x 12"	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL ←	3,1	
	D3-4	54" x 16"	STREET NAME SIGN "Fifth St"	*	2
	D3-4	54" x 16"	STREET NAME SIGN "Bern St"	*	1,1
	R3-7L	30" x 30"	LEFT LANE MUST TURN LEFT		1

* OVERHEAD STREET NAME SIGNS TO BE STRUCTURE-MOUNTED FLAT SHEET ALUMINUM WITH STIFFENERS. LEGEND AND BORDER TO BE WHITE REFLECTORIZED TYPE III OR TYPE VII SHEETING ON GREEN REFLECTORIZED TYPE III OR TYPE VII SHEETING.

** ALL SIGNS TO UTILIZE REFLECTORIZED TYPE III OR TYPE VII SHEETING.




2.5" Radius, 0.8" Border, White on, Green;
"Bern", ClearviewHwy-3-W; "St", ClearviewHwy-3-W;
Table of widths and spaces


	B	e	r	n	S	t
6.8	5.5	1.6	5.3	2.0	3.3	1.8
	5.0	6.0	5.2	1.2	3.5	6.8

EXISTING	PROPOSED	LEGEND
		- MAST ARM
		- PEDESTAL
		- VEHICULAR SIGNAL HEAD
		- PEDESTRIAN SIGNAL HEAD
		- SIGN
		- LUMINAIRE
		- VEHICLE DETECTOR
		- PEDESTRIAN PUSH BUTTON/SIGN
		- CONTROLLER ASSEMBLY
		- JUNCTION BOX
		- CONDUIT/SIZE
		- SOLID WHITE LINE/WIDTH
		- BROKEN WHITE LINE/WIDTH
		- SOLID YELLOW LINE/WIDTH
		- DOUBLE SOLID YELLOW LINE/WIDTH
		- CURB RAMP
		- LICENSE PLATE READER

COUNTY :	BERKS
MUNICIPALITY :	CITY OF READING
INTERSECTION :	FIFTH STREET (SR 2005) & BERN STREET
REVIEWED :	
MUNICIPAL OFFICIAL	DATE
REVIEWED :	
DISTRICT TRAFFIC SIGNAL DIVISION	DATE
RECOMMENDED :	
DISTRICT TRAFFIC ENGINEER	DATE

STRUCTURE NO.	ITEM NO.	ROUTE	STATION	SIDE	Off-set	H	K	L	MAST ARM										
									Arm A										
									Signal Location					Sign Location					W
									M	N	O	P	Q	R	S	T	U	Y	
	0951-0125	SR 2005	6+31.09	RT	29	19'	10'	25'	25'	13'								5'	0°
Totals																			

- VERTICAL POLES AND MAST ARMS TO BE DESIGNED BY MANUFACTURER TO ADEQUATELY SUPPORT LOADS AS SHOWN ON THE PLAN OR MAXIMUM LOAD REQUIREMENTS ESTABLISHED BY AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WHICH EVER IS GREATER.

ELECTRICAL DISTRIBUTION SYSTEM													
Description	1 Inch Conduit	2 Inch Conduit	3 Inch Conduit	Trench and Backfill, Type I	Trench and Backfill, Type II	Trench and Backfill, Type III	Signal Cable 14 AWG - 3 Conductor	Signal Cable 14 AWG - 5 Conductor	Signal Cable 14 AWG - 7 Conductor	Junction Box JB - 26	Junction Box JB - 27	Electrical Service, Type C	Detector Lead In Cable
Item Number	0954 0011	0954 0012	0954 0013	0954 0151	0954 0152	0954 0153	0954 0201	0954 0202	0954 0203	0954 0301	0954 0302	0954 0403	0956 0001
Unit	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	L.F.
Location													
 to JB4			6		6								
SEE WIRING DIAGRAM							310	700					
TOTALS			6		6		310	700					

- CONSTRUCTION NOTES:
1. THIS WORK IS TO BE FURNISHED, INSTALLED AND OPERATED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE SPECIAL PROVISIONS OF THIS CONTRACT.
 2. INSTALL 25 FOOT TRAFFIC SIGNAL MAST ARM AND FOUNDATION, POLE NO. 2 ON NORTHEAST CORNER, SCHEDULE POLE SPOT WITH PENNDOT 5-0 TRAFFIC SIGNAL SECTION AND CITY OF READING REPRESENTATIVES PRIOR TO PLACING THE ORDER OF THE POLES.
 3. INSTALL 3 INCH CONDUIT FROM EXISTING MAST ARM FOUNDATION LOCATION TO NEW MAST ARM FOUNDATION. REPAIR/ REPLACEMENT OF SIDEWALK FOR TRENCHING AND BACKFILL OPERATION IS INCIDENTAL TO THE TRENCHING AND BACKFILL ITEM.
 4. INSTALL SIGNAL CABLE IN ACCORDANCE WITH THE WIRING DIAGRAM.
 5. INSTALL PEDESTRIAN AND VEHICULAR SIGNAL HEADS ON THE NEW TRAFFIC SIGNAL MAST ARM POLE.
 6. REMOVE EXISTING TRAFFIC SIGNALS AND APPURTENANCES ON THE NE CORNER. REMOVAL OF THESE ITEMS IS INCIDENTAL TO THE TRAFFIC SIGNAL MAST ARM SUPPORT, ITEM 0951-0125.
 7. REMOVED TRAFFIC SIGNAL EQUIPMENT/ APPURTENANCES IS TO BE RETURNED TO THE CITIES' PUBLIC WORKS FACILITY AT 503 NORTH 6TH STREET, READING, PA.
 8. INSTALL THE EXISTING PEDESTRIAN PUSH BUTTONS, STREET NAME SIGN AND EMERGENCY ROUTE SIGN ON THE NEW MAST ARM POLE. THIS WORK IS INCIDENTAL TO THE TRAFFIC SIGNAL MAST ARM SUPPORT, ITEM 0951-0125.

MISCELLANEOUS ITEMS			
Item No.	Quan.	Unit	Description
0955-3208	2	EA	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS, LED LENSES
0955-3722	2	EA	PEDESTRIAN SIGNAL HEAD, TYPE B

FLAT SHEET ALUMINUM SIGN TABULATION						
Symbol	Series	Size	Area Each (Sq. Ft.)	Remarks	Quantity Each	
					Post Mounted	Pole Mounted
					Post Mount Type B S.F.	931-0001 Post Mount Type C S.F. 932-0001 Post Mount Type F S.F. 935-0001
* B	R10-3BL	9"x12"	0.75	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL ←		2
				TOTALS		2

* SIGN INCIDENTAL TO ITEM # 0951-0025, TRAFFIC SIGNAL MAST ARM SUPPORT

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	BERKS	2005		10 OF 10
PERMIT NO.:06-301-001		SHEET 3 OF 3		
DATE ISSUED: 3-2-55		DATE REVISED:		

COUNTY :	BERKS
MUNICIPALITY :	CITY OF READING
INTERSECTION :	FIFTH STREET (SR 2005) & BERN STREET
REVIEWED :	
MUNICIPAL OFFICIAL	DATE
REVIEWED :	
DISTRICT TRAFFIC SIGNAL DIVISION	DATE
RECOMMENDED :	
DISTRICT TRAFFIC ENGINEER	DATE